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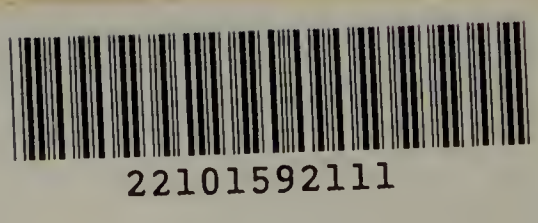
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THE PALACE OF KNOSSOS

Provisional Report for the Year 1903.

(Plates I.—III.)

§ 1.—The Campaign of 1903.

When operations opened at Knossos, on February 23, 1903, it seemed to me at first sight probable that a comparatively short Campaign would exhaust the resources of the Palace Site, although the work entailed by the search for the tombs might itself be of gradual execution and uncertain quantity. But the site itself proved still inexhaustible, especially in its lower strata. The region of which the exploration had still to be completed on the South-East was supplemented by an unexpected extension of the site on the North-West, including the Theatral Area. Annexes, like a neighbouring building in the same quarter, proved of interminable extent and rich in contents, including a hoard of magnificent bronze vessels. What is practically an important dépendance of the Palace, described in this Report as the 'Royal Villa,' opened out to the North-East, and in addition to this, lower floor-levels, comprising deposits of extraordinary interest, were struck at a great number of points within the already excavated area of the Later Palace. Deep basement rooms were unearthed and a whole additional system of walled pits belonging to an earlier building. The Kaselles, already partially explored in the West Magazines, were traced beneath the later pavement of the Long Gallery, while the discovery of the Temple Repositories in the neighbouring region about the Pillar Rooms, made towards the close of the season's work, represents in many respects the culminating point of interest in the whole four years' excavation of the Palace Site. The great variety of objects contained by these

Repositories, including the faïence figures of the Snake Goddess and her Votaries, and the exquisite series of relics in the same material, throws an entirely new light on the art and religion of the Later Palace at what seems to have been its most brilliant epoch, as well as on the system of writing then employed.

From the point of view of the stratification of the various historic layers of the site, the results of the last season's work have been extremely satisfactory. Not only have the earlier Neolithic strata been further explored, but many new data have been acquired as to the stages of culture that intervened between the close of the local Stone Age and the foundation of the Later Palace. A remarkable deposit to be described in the present Report throws the first real light on the transitional form of culture belonging to what I have ventured to term the 'Early Minôan Period.' The Ceramic and other illustrations of the succeeding 'Middle Minôan' have also been of the most remarkable kind, including vases of the polychrome style which for beauty of form and decorative design are as yet unrivalled among objects of this class.

These various developments necessarily enlarged the scope of the excavations, and the 50 men with which the work began had been progressively raised to about 200 by the end of April. Throughout the earlier part of the campaign the work was much hampered by the continual rains. There had been about forty days' almost incessant rain before the operations began, and the downpour continued with little break for an equal space of time after the work had been set going. The earth was thus completely sodden, and the pits continually filled with water, so that the labour of extracting every spadeful of earth was more than doubled. The weather did not definitely improve till the latter part of April, and the operations which had thus been seriously retarded were continued to the end of the first week in June.

I again had throughout the valued assistance of Dr. Duncan Mackenzie in directing the works, and, in drawing up the present Report, I have constantly consulted the careful records kept by him in his Day Books Mr. Theodore Fyfe was also happily able to come out for part of the time to execute the architectural plans and drawings. A series of very careful drawings of some of the most important finds was also made, under my supervision, by the Danish artist, Mr. Halvor Bagge.

The veteran services of Gregorios Antoniou were once more secured

in the capacity of foreman, and Kyrios Papadakis again acted as mender and *formatore*.

A great deal of labour and material was again expended on works of conservation, such as supporting the remains of upper storeys and staircases, especially in the Royal Villa, the whole superincumbent earth behind which had to be buttressed up by a high wall. Another large undertaking of the kind was the rebuilding of the upper part of the Northern wall of the Theatre and restoring the adjoining tiers of stone seats, without which the whole of these interesting remains would have been rapidly disintegrated. The central strip of the pavement of the Long Gallery, which had to be removed to explore the cists below, was afterwards restored by means of gypsum slabs cut for the purpose. A watch tower, the upper framework of which is of wood, was also built in the Central Court in order to secure a general panorama of the Palace.

A great many supplementary observations were also carried out within the Palace limits, and the researches of Dr. Mackenzie were specially successful in discovering several window openings, the presence of which had not been hitherto detected. The most important of these opened in the wall to the North of the Light well of the Queen's Megaron, giving light to the Private Staircase.

In pursuit of the search for tombs a large area was methodically explored, extending over a quarter of a mile to the North of the Palace, but, though a good many graves were found, they had all been rifled in antiquity, and none of them could ever have been of great importance. One result of these explorations was that a large number of houses, going back to Early Minôan times, were traced over the whole of this area and to the East as far as the rocky steep that there overhangs the stream.

§ 2.—THE SOUTH-EAST HOUSE.

Already towards the close of the preceding Season parts of a staircase, passage, and adjacent rooms were unearthed at the South-East angle of the Palace area. The excavation now completed on this side has brought out an exceptionally perfect house-plan, which will be seen in Fig. 1. The building itself may be regarded as an inner dépendance of the Palace, not improbably an official residence. Although, owing to the declivity on this side, the whole is set at a slightly different angle from the main

building, it stands in most intimate relation with it, and its main entrance was evidently from a line of terrace which extends Northwards to the Portico of the Hall of the Double Axes.

To this terrace level, indeed, it stands in the same relation as the 'Domestic Quarter' of the Palace, with its stately Halls of the Colonnades and of the Double Axes, to the Central Court. As there the quadruple staircase from the Court above afforded the main entrance to the lower as well as the upper floors, so in this case, too, the stairway down from the upper terrace was evidently the chief means of entering the lower rooms. Like the Domestic Quarter, too, lower rooms of this South-East House are constructed in a cutting in the side of the slope, partly at the expense of earlier human strata, partly hewn out of the soft virgin rock. Thus immediately to the North of these chambers, which, as will be seen, belong to the Later Palace Period, are Magazines at a slightly higher level belonging to the Early Minôan Age.

The remarkable 'Royal Villa' excavated this season to the North-East of the Palace and described below[1] displays identical features. There too the main entrance was by a flight of stairs descending from an upper terrace, and there too the lower rooms were built into a cutting in the side of the hill.

The South-East House, like the Villa to be described below, presents an excellent example of what may be called the Miniature Palace Style of building (see plan, Fig. 1). All the familiar features, such as the stairs, with their great angle blocks, the corridors, the gypsum lining slabs, the door jambs with their reveals, the porticoes, and the pillar rooms are repeated on a smaller scale. Nor in the artistic character of the contents is there any falling off. In the case of the South-East House the relics found evince the highest level of taste on the part of the owner.

Of the stairs the whole lower flight consisting of nine gypsum steps[2] was preserved, but of the upper flight only parts of two, adjoining the square block at the first landing. The upper stair-block which, like the other, has the usual four dowel holes for wooden construction, was found slightly displaced. About the same level were also found door jambs belonging to the upper storey of the house. It seems probable that the middle landing of the staircase was lit by a window in its North wall.

[1] § 20, p. 130 *seqq.*

[2] 1·39 m. wide, 0·38 deep with a tread of 0·13.

Immediately to the left of the foot of the lowest flight of steps opens a corridor (A 1 in plan) about a metre wide and 7·45 metres in length. On the paved floor of this, which lay about 2·50 metres below the surface, were found fragments of vases in the fine Later Palace style and painted plaster which seems to have been derived from the walls of this and probably of another similar corridor above. These fragments of wall-painting showed lilies, olive sprays, and grasses, of singular fidelity and beauty.[1] A group

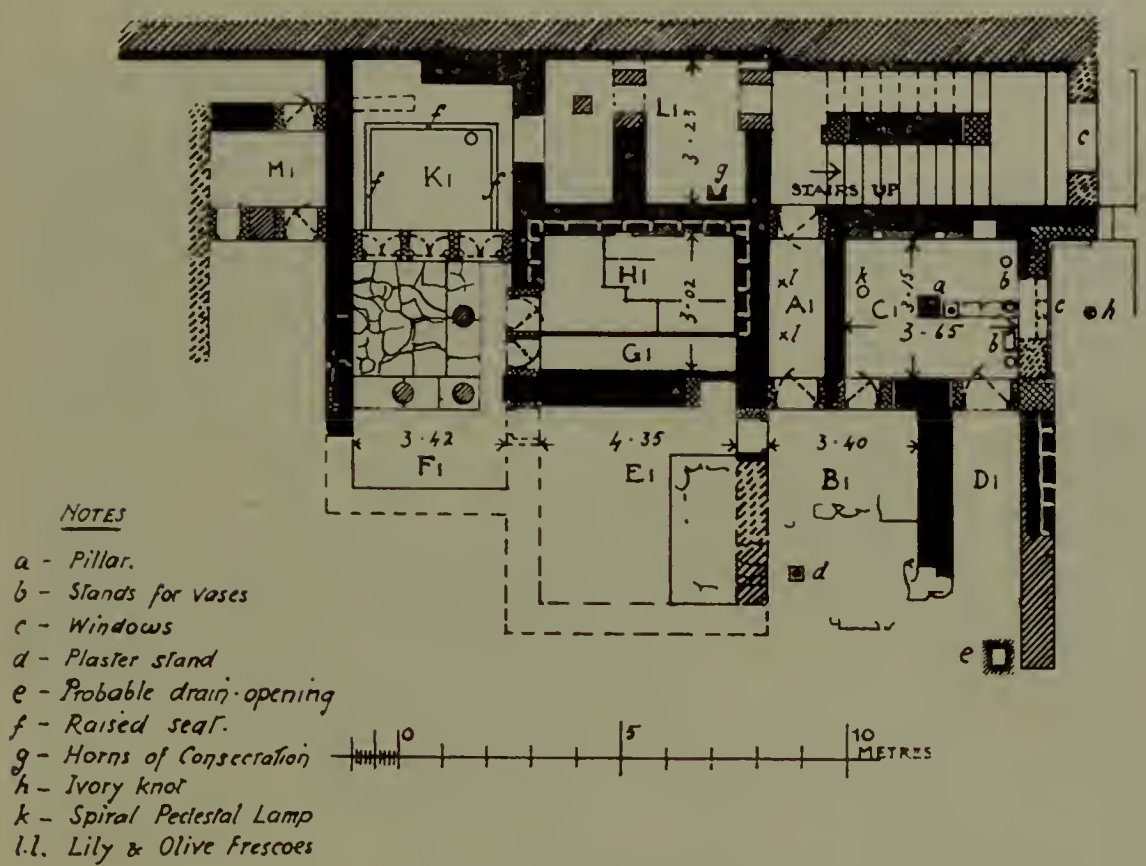


FIG. 1.—PLAN OF SOUTH-EAST HOUSE.

of lilies suggests one of Morris's fine wall-paper designs, but there is a touch of nature here which goes beyond modern decorative art—the petals of the flowers being in some cases delineated as half detached by the passing breeze.

It is a characteristic feature of this short corridor that there were doors at both ends of it, which, as is shown by their sockets and the position of the reveals of the door-jambs, opened inwards. The passage led at its

[1] See *Report*, 1902, p. 110.

further end to a room (B) with remains of pavement, the East wall of which was lost owing to the downward slope of the hill. Here at D was found a curious object of painted plaster having six legs and an oval aperture surrounded by a rim.[1] This stand or table, which has a ritual aspect, shows a coloured decoration of cream-white rosettes on a dark red ground. In style it seems to represent a surviving tradition of the Middle

Fig. 2.—Pillar Room and Exterior South Wall; South-East House.

Minôan ceramic decoration, and its colouring recalls that of the small terra-cotta Sanctuary.[2]

A second doorway in the West wall of the room with the plaster stand, leads to a nearly square chamber, the distinguishing feature of which is a

[1] It is shown out of its place on the top of the wall of D 1, in the view given in Fig. 2.
[2] *Report*, 1902, p. 28, *seqq.*

square stone pillar. The pillar rests on a rough foundation block of limestone, and in its present state consists of six blocks, the lowest of them gypsum, rising to a height of 1·87 metre (see Fig. 2). Against this on the North side was a gypsum block in the shape of a truncated pyramid,[1] showing traces of a horizontal ribbed moulding, and provided with a socket above. This object belongs to a class found in the Palace Magazines and elsewhere, and which seem in many cases to have served as torch holders. It is interesting to note, however, that on the painted designs of the Palaikastro *larnax*[2] and the remarkable sarcophagus found by the Italian Mission at Hagia Triada,[3] stepped bases of a similar kind appear as the stands for the sacred Double Axes.[4] The possibility that the present base served a similar religious function cannot therefore be excluded.

It seems at any rate clear that there were other means of lighting this Pillar Room, since near its South wall was found a stone shaft, adorned with spiral bands and flutings, which had evidently formed part of the pedestal of a tall lamp (Fig. 3). The material is a purple gypsum, resembling porphyry, and the spiral bands bear decorative reliefs of a Late Minôan character.[5] This pedestal exceeds in richness of design any other object of the kind found within the Palace, and tends to show that considerable importance was attached to this small Chamber.

From the foot of the pillar a rough foundation runs to the North wall of the room. Along this wall are ranged a series of stone bases, circular and oblong, for the support of vessels, and near the outside of the wall were found fragments of vases in the Later Palace style. About a metre north of this spot, but in a stratum which also contained some vase fragments with a black ground, there came to light an ivory object in the shape of a knot with a fringed border (Fig. 4). This object exactly resembles the two alabaster knots found in the Fourth Acropolis Grave at Mycenae.[6] The connexions in which it is elsewhere found show that it had

[1] It is 23 cm. high and 30 square at the base.

[2] *B.S.A.* vol. viii, p. 299 and Pl. XVIII.

[3] A summary account of this is given by Dr. R. Paribeni, *Lavori Eseguiti*, &c., 1903, p. 30.

[4] A small steatite base of the kind, obtained from a peasant at Palaikastro, has been connected with this usage by Mr. Bosanquet (*B.S.A.* viii, p. 300).

[5] Compare the design on a painted vase from Phaestos, L. Pernier, 'Scavi della Missione Italiana a Phaestos, 1900-1901.' Rapporto preliminare (*Monumenti Antichi*, vol. xii.) Tav. VIII. 3.

[6] Schliemann, *Mycenae*, p. 242, Fig. 352.

a sacral significance. On a gold signet ring from Mycenae[1] two knots of the same kind are seen suspended from the entablature of a sacred pillar between two lion guardians, while on a seal impression from the Palace of Knossos they are suspended from a sacred tree. On a lentoid gem from

Fig. 3.—Pedestal of Purple Gypsum (about $\frac{1}{3}$).

Fig. 4.—Sacral Knot of Ivory ($\frac{2}{3}$).

the Heraeum[2] two similar knots are seen on either side of a bull's head surmounted by the Double Axe. Again, on a lentoid gem found in the

[1] *Mycenaean Tree and Pillar Cult*, p. 61, Fig. 39 and p. 62.

[2] Schliemann, *Mycenae*, p. 362, Fig. 541; Furtwängler, *Antike Gemmen*, Pl. II. 42.

Palace of Knossos a Goddess appears holding the same fetish weapon over one shoulder, while on the other she bears a very large example of a similar fringed knot.[1]

The Pillar Room itself recalls a characteristic feature of Minôan buildings well illustrated in the Palace itself by those chambers the pillars of which are so conspicuously marked by the Double Axe symbol. In the Royal Villa to be described below we meet with a similar chamber. It recurs in the case of certain private houses at Knossos and elsewhere in Crete and again at Phylakopi in Melos. It is moreover noteworthy that while in the case of the Pillar Rooms of the Western Palace wing the pillars may have incidentally served a structural purpose in supporting upper storey columns, in the generality of instances, placed as they are in the centre of small square rooms, they possess no apparent practical utility. On the other hand, the small votive cups ranged around the pillar in the house excavated by Mr. Hogarth at Knossos, on the opposite hill of Gypsádes,[2] and the libation vessels found in those of Phylakopi certainly point to a ritual usage. The original conclusions suggested to me by the Double Axes cut on the pillars of the two Palace rooms[3] have now moreover been confirmed by the discovery of relics of an important sanctuary in their immediate vicinity. In the case of the pillar room of the South-East House we may therefore with great probability also recognise a domestic sanctuary connected with the cult of the divine pair whose fetish forms are constantly reappearing in the shape of Double Axes. Whether or not the socketed pyramidal base here by the pillar actually, as in the case of other similar bases, served to support the shaft of the sacred weapon, we can certainly trace a reference to the prevailing Palace cult in the ivory knot discovered hard by.

In the West wall of the pillar room is a well defined niche which may have served for a cupboard. On removing a stone in its South-West corner a hole was found, widening below into a cave artificially cut out of the soft rock. It was largely filled with earth that had apparently filtered into it, but, except for a few fragments of late Minôan and Neolithic pottery, nothing was found in it. It had possibly served as a tomb in a very early period. It is even conceivable that some religious tradition connected with it may have rendered its preservation appropriate

[1] Knossos *Report*, 1902, p. 102, Fig. 59.

[2] *B.S.A.* vi, p. 76.

[3] *Mycenaean Tree and Pillar Cult*, p. 12 *seqq.*

in connexion with the later sanctuary represented by the pillar room. It does not seem to have been deliberately filled in, though as walls ran partly above it this might have been thought advisable.

A second doorway on the East side of the pillar room led to what looks like a store-chamber of the usual elongated form. Within it was a stone slab showing the circular hollows where vessels had stood. At the further end was what appears to have been a sink or drain opening covered by a slab.

The wall which forms the Northern side both of the storeroom, D 1, and the pillar room is at the same time the exterior wall of the house in this direction. Its structure, which displays remarkable features, is best preserved at the corner near the staircase landing (see Fig. 2). It is there seen to consist externally[1] of a layer of fine limestone blocks, resting on a plinth of the same material, followed above by three courses of gypsum blocks, and these again by two more of limestone. At a point nearly opposite the pillar the upper courses of the masonry suddenly break off, and a strong presumption arises that there was at this point a window opening as shown in the plan.

Returning now to the Eastern opening of the corridor A 1, and turning South, we enter a suite of chambers which seem to have been the chief living rooms of the house.

E 1, the first of these thus approached, shows on its North side remains of a low stone platform which suggests the place of a couch. The South door of this room, one jamb of which alone was preserved, opens on what was undoubtedly a light area bordering two faces of a small portico belonging to the principal Megaron of the household (Fig. 5). The outer porch of this was supported by three pillars, the bases[2] of which are visible, resting on a low limestone stylobate which encloses a small square, paved with irregular slabs of dark grey ironstone. From this again a triple opening[3] between pillar bases leads to the little inner hall. We have thus in miniature an arrangement very similar to that of the Portico and Hall of the Double Axes. The sockets, moreover, visible in the angles of the reveals of the pillar bases, show that in this case too the openings were provided with double doors folding back against the pillars. When thus opened the doors were made as it were an

[1] There was, as usual, an inner backing of rubble masonry.
[2] About 38 cm. in diameter.
[3] In each case 90 cm.

integral part of the pillars, and presented no obstacle to free passage between what thus became the inner and outer sections of a single hall. On the other hand, the inner section could at any time either for warmth or security be entirely shut off from the outer portico. This ingenious system gives a wonderful elasticity to the interior arrangement of the Minôan houses.

FIG. 5.—MEGARON OF SOUTH-EAST HOUSE AND ADJOINING ROOM.

The inner section of this small Megaron formed a small room only 3·60 metres North-South by 2·50 East-West. There are traces of a lining of gypsum slabs on the walls and a very low stone bench is seen running along its three inner sides.[1] Its top is formed of gypsum

[1] It is only 9 cm. high ; about 35–40 deep, and is edged with gypsum strips 14 cm. thick.

slabs on a bedding of terracotta coloured clay. The same clay seems to have formed the original floor, for there were no signs of any paving. The back wall of this chamber is built against the soft face of the virgin rock here cut out for it; and there seems to have been a kind of bay or closet in the South-West corner.

It appears that this inner section of the Megaron (K 1) and a small adjacent area, unlike the rest of the house, had continued to be occupied during the period that succeeded the destruction of the Palace. There was here traceable a later clay floor level, about 15 centimetres above the earlier floor, upon which were found the remains of several late Mycenaean painted vases with degenerate patterns, including fragments of a store-jar or *pithos* with an octopus design. Here too was a circular gypsum jar-rest at the same level with a late, painted jug upon it. In the small passage rooms immediately to the North, which seem to have served as a more direct means of communication between the Megaron and the entrance stairs, this later occupation had left more serious traces. These rooms seem to have been entirely remodelled and in place of the regular Minôan door jambs with reveals preserved throughout the rest of the building, there were here found mere oblong blocks of gypsum —a visible sign of architectural degeneration. One only of the earlier jambs had been re-used in the South doorway. Here too the floor had risen to the later level, strewn with remains of a 'Stirrup Vase' showing the usual octopus design of degraded style. The most interesting relic, however, of this period, was a limestone cult object in the shape of 'Horns of Consecration.'[1] This piece of ritual furniture lay near the East wall of the room (L 1) nearest the staircase, where it had been placed on a small platform consisting of earthenware sherds that had the appearance of having been rounded in running water. It looks therefore as if during the later Period of Partial Occupation this small chamber had fulfilled the function of a domestic sanctuary for which in the earlier period the pillar room, C 1, seems to have served.

The very centre of the house was occupied by a paved oblong chamber (H 1),[2] exceptionally well built, and to which access was obtained by a door opening inwards from the portico of the Megaron (see Fig. 5). Its South,

[1] There was not in this case any socket between the horns as in case of those of the Shrine of the Double Axes. The horned object is 20 cm. wide and 19 high.

[2] Its measurements are 4·37 m. from N. to S. by 2·20 from E. to W.

West, and North walls were composed of small well cut limestone blocks, of which at the North-West corner as many as nine courses were visible. These walls were backed by rubble masonry, while their faces towards the room itself had been covered with gypsum slabs. The neatly finished somewhat small masonry here exhibited is characteristic of some of the latest work in the Palace, as for instance the outer staircase wall of the East Bastion. In these cases the blocks are associated with a particular class of finely incised marks which belong to the latest Palace period. It is therefore interesting to note that signs of this class, notably the eight rayed stars, appear on the blocks of the present chamber.

Inner spaces, other than light wells, with good masonry are rare in the Palace. It seems therefore probable that the room H 1 must have fulfilled some important function. From its central position it could hardly have been lighted except through the doorway, and it seems possible that we have here the bedroom of the master of the household.

A curious feature of this room is the remaining wall, on the East side, which is simply a thin partition consisting of gypsum slabs. This partition separates the room from what appears to have been a long narrow closet which, like room H 1 itself, was also entered by a door opening from the portico of the Megaron.[1] The gypsum partition slabs must naturally have been supported by some kind of wooden framework inside this closet, but of this there were no remaining traces. The fact that the door shut from within makes it probable that the closet too served as a small bedroom.[2]

South of the Megaron are remains of another section of building, the Southern limit of which is lost owing to the falling away of the ground. Its most complete existing member is the room M 1, entered by two doors with a pillar between, a recurring feature of the façades of small faïence houses in the 'Town Mosaic,'[3] exemplified on a larger scale by the Great Megaron at Phaestos and apparently by that of the Western wing of the Palace at Knossos.[4]

[1] The existence of a recess in the wall at the North-West corner of Room E 1 gave rise to the supposition that there was actually an aperture into this elongated space E 1 at that point, and that it was therefore a passage. But (1) there is no evidence that there was any opening at this point, though the wall was thinner. (2) There is no trace of door-jambs, such as in that case would almost certainly have existed. (3) Room E 1 having already a doorway leading into the portico, such a passage way would have been superfluous.

[2] This is Dr. Mackenzie's opinion.

[3] Knossos, &c., *Report*, 1902.

[4] On this feature of the Cretan House and its architectural consequences, see F. Noack, *Homerische Paläste*, p. 17 *seqq.*

§ 3.—Notes on the Opening of Doors.

The heavy rains of this season first brought clearly out the scorings on the thresholds caused by the opening and shutting of the doors. This was first noticed in the Hall of the Double Axes and adjoining Hall of the Colonnades, but afterwards clear traces were observed in various parts of the Palace and its dependencies. In the 'Royal Villa' to be described below it was specially perceptible. This phenomenon coupled with the appearance of the hinge sockets and many bolt-holes makes it possible to understand a great deal more about the interior arrangements of the building. The doors, as Dr. Mackenzie has justly noted, were controlled on the side towards which they opened, and the private rooms and passages are in this way found to command the more public quarters.

Mr. Fyfe has prepared a plan of some characteristic examples of these door openings (Fig. 6) and has supplied the following descriptive note:

Four of the examples illustrated (Nos. 1, 2, 3, and 4), show unmistakable marks in the floor-slabs of the doorways, caused by the friction of the doors, moving on their hinges.

I.—*Double, or 'Two Leaf Doors.'*

All the examples given (except No. 1, and No. 6 which is too large a door to come into the argument) confirm the supposition that double doors were the rule where the door-jambs have double 'reveals.' Each leaf folded back into the recess of the gypsum jamb (which formed a base for a similar recess in the woodwork above), after the manner of a modern folding door, or a shutter in its shutter-boxing. Double doors are found in doorways communicating between the various rooms and corridors of a system, in house or palace.

II.—*Single, or 'One Leaf' Doors.*

Single doors were evidently the rule where the door-jambs have only one reveal (see Nos. 3 and 4). They occur more particularly where the end of a system is reached, as is apparently the case in No. 4, where the private quarter of the Women's Apartments and Royal Stores is shut off from the 'Hall of Colonnades'—a partly open colonnaded court looking on to the main staircase and corridor giving access to the East Slope Halls.

To take these doors in detail, in their order of illustration:—

No. 1, from the Pillar Room of the Royal Villa (marked 'North door of N.-E House' on Plan) shows a rather puzzling double door, in which the leaves do not appear to have met. It is impossible to account for this except by the supposition that one leaf of the door was generally kept closed, and fastened by a bolt running into the rectangular socket in the floor slab: the other, and

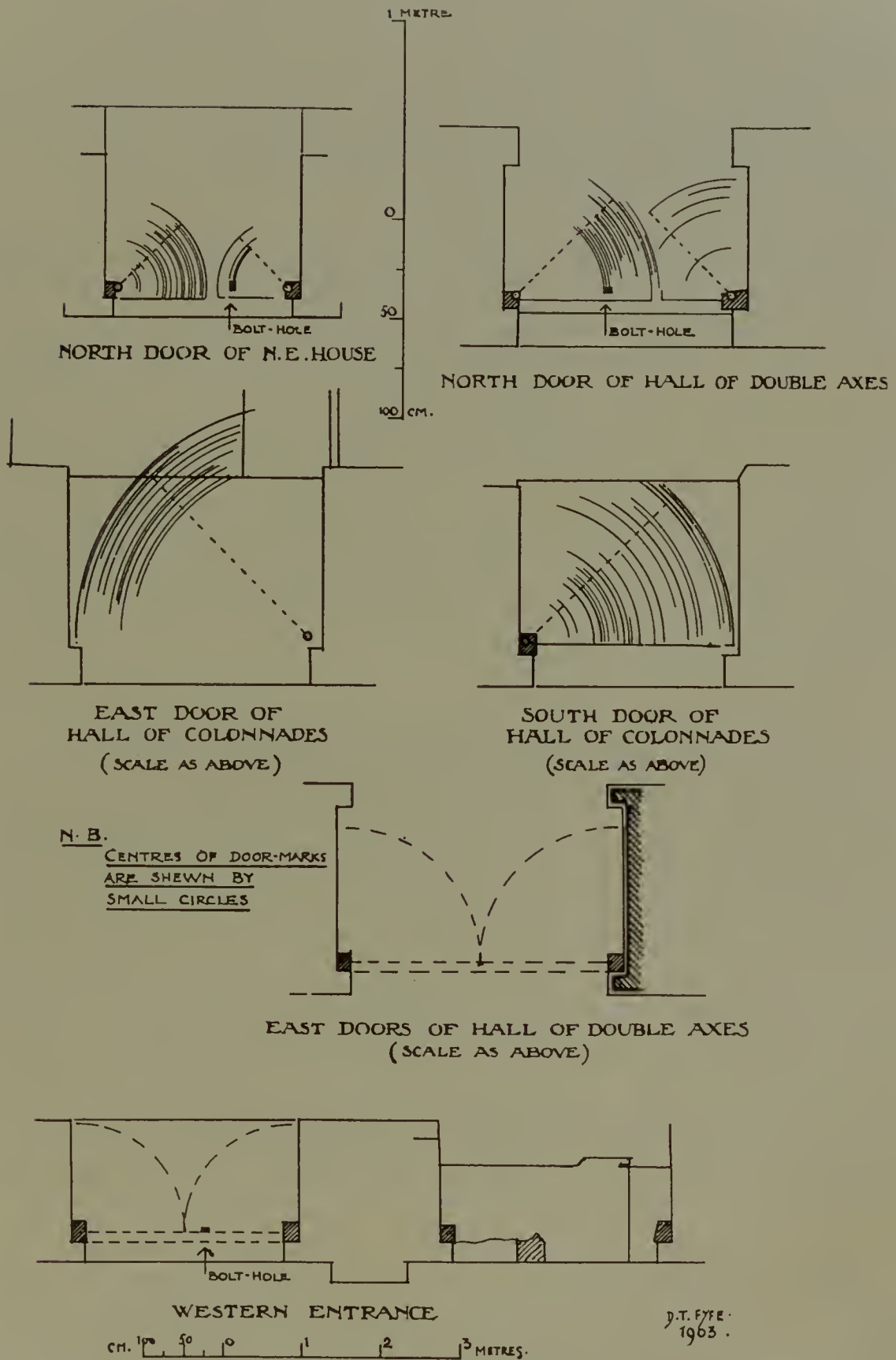


FIG. 6.—PLAN SHOWING SOCKETS FOR HINGES AND BOLTS AND SCORINGS CAUSED BY SWING OF DOORS.

larger leaf (which shows evidence of having been used more), being allowed to swing free.

It is, however, possible that the right-hand leaf was larger than is represented by the present limit-mark; and that this was a double door, of two equal leaves, meeting or slightly overlapping, in the ordinary manner.

The threshold line, crossing from jamb to jamb, is more clearly marked in the case of the left-hand leaf than in the right.

In No. 2 (North door of Hall of Double Axes), it is fairly clear that the two leaves of a double door overlapped, but the left-hand leaf must have scraped the centre of the floor-slab more than the right-hand leaf.

A bolt-socket in the floor also exists in this doorway, which from its position seems to show that the bolt probably fastened the end of the right leaf, after the left leaf had been closed. The lines on the threshold crossing from one reveal to the other are really slight sinkings. The front one is probably a little in advance of the actual front of the door when closed, and the other one may represent the common line of both leaves, when closed.

No. 3, from the East door of the 'Hall of Colonnades,' is an example of a large single door opening into the corridor which led to the (perhaps) more private 'Hall of Double Axes.' The floor-marks indicate the direction of the door-swing, and the outer limit of the swing is very clearly defined, showing a clearance of about $1\frac{1}{2}$ inches with the 'cheek' of the jamb. There is no definite hole cut in the floor slab for the hingeing apparatus.

No. 4, also from the 'Hall of Colonnades' (South door), has already been quoted. It shows more clearly than any other example the mechanism of a single door.

The front face of the door, when closed, is clearly represented by a line—the meeting of the back, and slightly higher front, of the threshold.

The position of this line is significant, as it shows that some of the doors, at least in the Palace, did not fit hard up to the reveals of their door-jambs; and that wooden door-frames may have been used These door-frames, if they existed, were not necessarily 'housed' into the floor slabs, as in this case only one rectangular opening is cut in the floor, and it is at the hingeing end; obviously, therefore, chiefly for the hingeing apparatus.

In the case of a double door (see Nos. 1, 2, 5, and 6), the *two* rectangular openings in the floor are obviously for the hingeing apparatus of each leaf; so that the existence of wooden door-frames on which doors were hung is not proved except by the scant evidence already given in discussing No. 4.

The whole question of door-fixings, however, is obscure, as there is evidence to show that the Palace builders were familiar with metal pivot-hinges, sunk into holes in the floor, ground out by the drill; and the large holes shown in the illustrated examples (see especially right side of No. 2), almost suggest door-frames.

Nos. 5 and 6 (East doors of Hall of Double Axes, and Western entrance of Palace) call for no particular remark; except that the former has on the right-hand side a clearly defined black line which shows the place of the woodwork jamb above the gypsum base; and the left half of No. 6—the great west door giving access to the Palace through the 'Procession' corridor—has a bolt-socket in the floor, $2\frac{3}{8} \times 1\frac{3}{4}$ inches.

§ 4.—EARLY MINÔAN BASEMENT WITH MONOLITHIC PILLARS.

About fourteen metres North of the South-East House, excavations completed this season have brought to light some very early basements with bays and pillars belonging to an extremely early period of the Minôan civilisation. Already in 1900 a trial pit sunk here to a depth of about 4·60 metres below the surface level had shown the existence of early walls to this depth and had been productive throughout the lowest two metres of early polychrome ware, including a curious vase in the form of a dove.

The walls, which at this spot began about 50 centimetres below the original surface of the ground, show a triple stratification, answering to three different periods. Of the walls of the highest stratum a height of about 1·30 metre is preserved. On a floor level answering to this layer rested a 'streaked' *pithos*, apparently belonging to the Latest Palace Period. In this stratum were also found fragments of good painted pottery of the 'Palace Style' and the two cups with ink-written inscriptions described in the preceding Report.

Another wall-layer, 65 centimetres in depth, leads down to the earliest and best preserved remains (see Fig. 7). These form what seems to have been a basement chamber, the roof of which was supported by two squared monolithic pillars of limestone resting on broad bases of the same material. The Western of these is 2·02 metres in height, the other, slightly broken at top, 1·90. The North Wall of the chamber has three projecting walls forming, with the side walls of the room, four bays or niches. Near the South Wall, opposite the space between the two pillars, was a shallow circular pit, about half a metre in depth and 1·30 metre in diameter. The walls where best preserved go up 2·10 metres. The small rough masonry and the deep character of the chamber much recall the deep walled pits of the North Quarter of the Palace. Pillars made out of a single block are not found in the Later Palace, though the Northern Pillar Hall shows a return to a similar system. There is no trace of a doorway, and it is probable that access to this basement was by means of a trap-door and ladder.

From its upper wall level downwards the pottery found in this chamber was of the early kind with polychrome decoration on a dark

ground, together with some contemporary pottery with a light ground. The Dove Vase itself was found here at a depth of about 4 metres below the surface of the ground. Various clay sealings of the Middle Minôan Period including some with pictographic characters[1] also occurred. A certain proportion of the polychrome pottery was of the fine egg-shell class so well represented among the contents of the East Magazines,[2] but there was here a larger proportion of coarser wares. It was also clear that some of these belonged to an earlier period than any

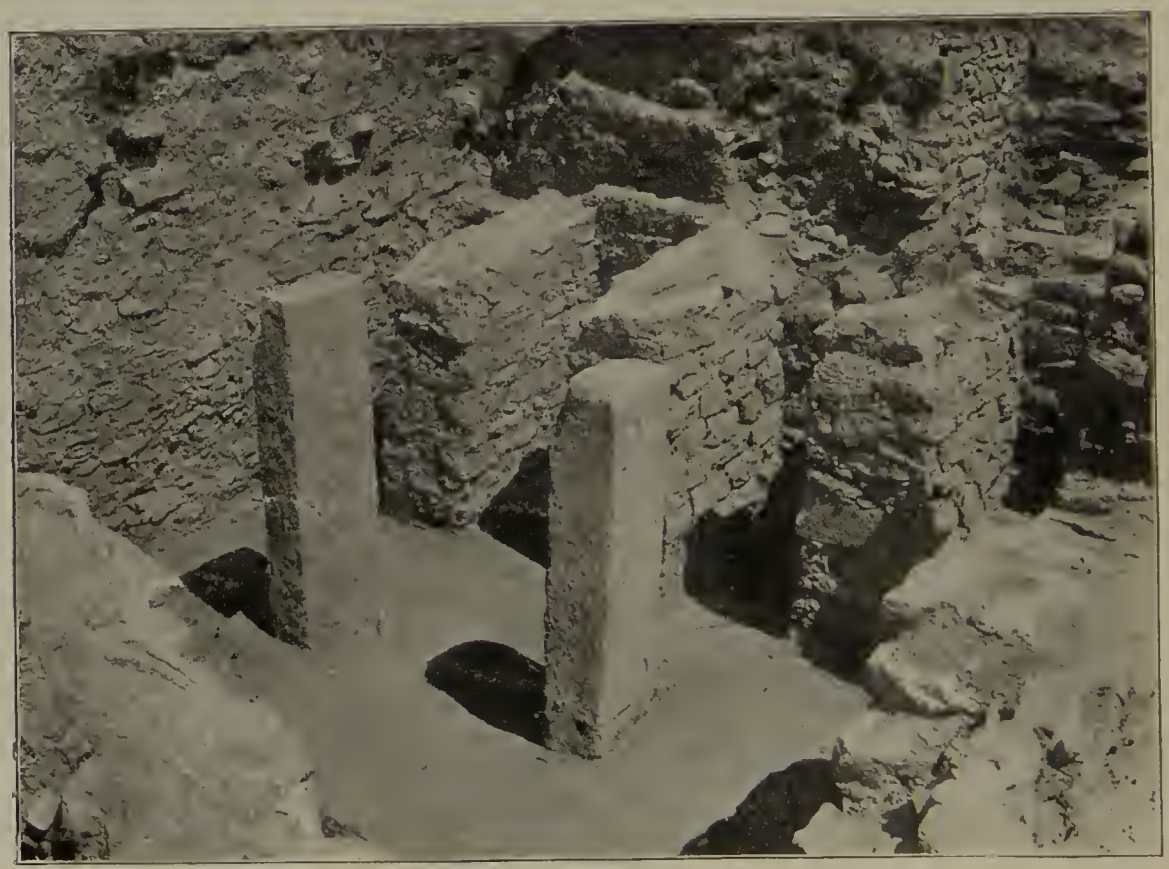


Fig. 7.—Early Minôan Basement with Monolithic Pillars.

of the vases of the East Magazines. A noteworthy feature here was the presence of polychrome fragments with plain angular decoration, such as chevrons and lozenges accompanied with dots, on a dark ground. These must be regarded as direct painted imitations of the more primitive hand-polished black ware with incised and punctuated patterns of the same character, filled in with pounded gypsum and occasionally also with red

[1] See *Report*, 1902, pp. 106, 107, Fig. 64. [2] *Report*, 1902, pp. 118–120, and Figs. 70, 71.

ochre. This class of plain geometric painted decoration, whether on a dark or a light ground, precedes the curvilinear on the Cretan pottery, and it is best to assign this special class to the Early as opposed to the Middle Minôan Period when the decorative designs show a greater variety and complication. The fact that this class of ware was well represented in the basement chamber must be taken to carry back the date of its construction to an extremely early period.

This is corroborated by the further discovery of fragments of vases showing a geometrical pattern in reddish-brown on a pale buff ground belonging to the early class of painted ware found in the deposit described in Section 16. The pattern was of the same form—two hatched obtuse triangles joined at the apex—as those of the other deposit, where they were found side by side with their incised prototypes.[1]

§ 5.—MIDDLE MINÔAN VASES AND SEALINGS FROM EARLIER PALACE FLOOR-LEVEL BENEATH ROOM OF OLIVE PRESS.

Already in 1902 the North-East corner of the Room of the Olive Press had been excavated to the Earlier Palace level, and in part to the Neolithic stratum below it. This work was now continued and the whole Eastern section of the room dug out to the Earlier Palace floor-level which lies about 3·20 metres beneath that of the Olive Press Room itself. Immediately above this earlier level, from about three metres below the later pavement, were found abundant remains of the fine polychrome ware that characterises the Middle Minôan Period. In elegance of form some of these vases may be thought to surpass any known examples of this exquisite class of ceramic fabric. Especially remarkable is a type, found here for the first time, showing a crinkled quatrefoil outline with two delicately modelled handles. An almost perfect specimen of one of these vessels in seen in Pl. II. Fig. 2*a–b*. The ground colouring is here a pale buff with festoons and other designs in black, white, and deep red. An extraordinarily beautiful feature is the introduction into the design of bosses of deep red colour imitating the thorns of a briar rose.

Other more fragmentary specimens show modifications of the same thorn-bossed type of vessel. A good many fragments also exhibit poly-

[1] See below, pp. 96–98, and Fig. 66.

chrome designs of flowering plants and foliage on a lustrous black ground, representing a stage antecedent to the more naturalistic vegetable designs of the succeeding period. A class of ware with a brilliant metallic lustre may compare with the ceramic imitations of silver plate, so characteristic of the age immediately succeeding the Dionysian Empire in Magna Graecia and Sicily. A fragmentary cup, completed in Pl. II. Fig. 1, from the same deposit, illustrates the reproduction in colour of what was obviously the repoussé decoration of an original in precious metal. It may well in turn serve a modern goldsmith as an artistic model. The inner design (Fig. 8) seems to represent a graffito pattern in the metallic original.

Fig. 8.—Inner Design of Cup (reduced).

In the same deposit there also occurred clay sealings in some cases impressed with characters belonging to the pictographic script. This, with other evidence such as that supplied by the occurrence of similar inscriptions in the early basement rooms described in Section 4, has now made it clear that the pictographic form of Cretan writing is not only typologically but chronologically earlier than the linear system of the Later Palace. The evidence supplied by the original finds of such clay sealings in the walled space behind the staircase of the Long Gallery [1] was in itself misleading. The sealings, discovered there and in the immediate neighbourhood in a scattered state, may possibly have found their way into the walled space in question owing to its having been filled in from a deposit belonging to the latest period of the Earlier Palace. Or, if—as it still seems preferable to believe—they really belong to the Later Palace, they

Fig. 9.—Middle Minôan Seal Impression: Wild Goat and Plant ($\frac{3}{2}$).

[1] *Report*, &c., 1900, pp. 25 and 59 *seqq.*

must in any case be referred to a time closely following its foundation.[1] Their ceramic associations as we see are frankly Middle Minôan, though they may perhaps be more exactly expressed as 'Middle Minôan II.'

Another interesting consequence of this conclusion is that already by the close of the Middle Minôan Period the gem engraver's art had attained a very high degree of naturalism. This is shown by the occurrence in

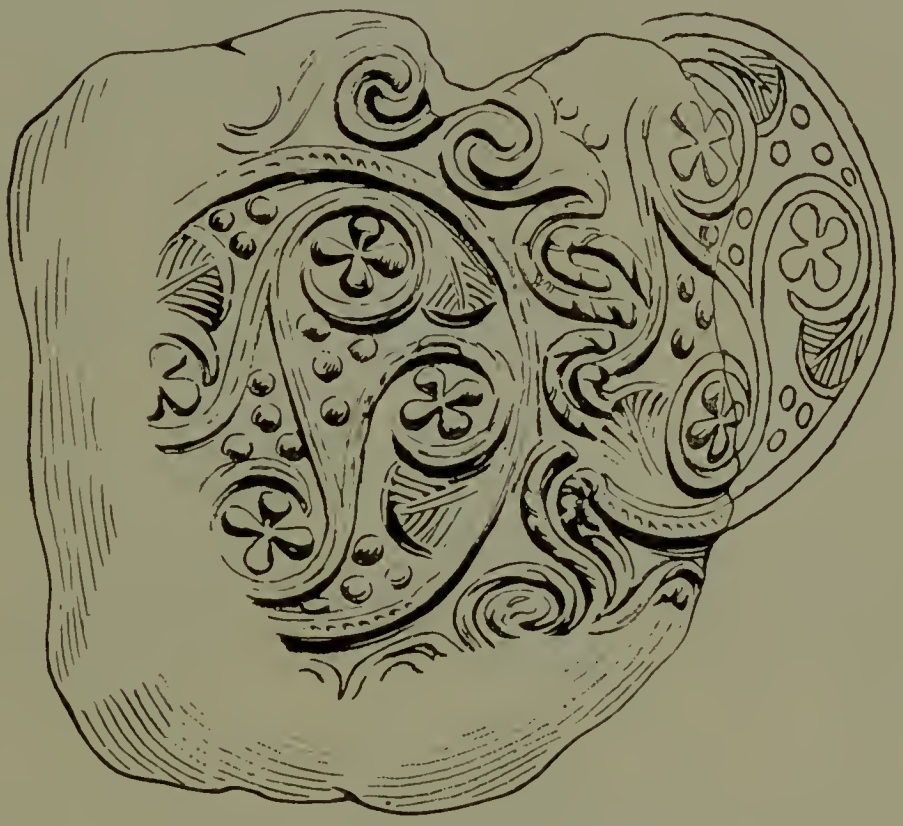


FIG. 10.—CLAY SEALING WITH DECORATIVE SCROLLS: MIDDLE MINÔAN (?).

[1] It must be borne in mind that the evidence as to the exact stage of culture existent at the time of the foundation of the Later Palace is not so clear as that which illustrates the close of its First Period. The ceramic and other relics found immediately below the remodelled floors belonging to the Second Period of this Palace sufficiently declare the character of its culture in the middle stage of its history—at the close, that is, of its First Period. We see there a more or less transitional phase which may conveniently be termed Late Minôan I. On the other hand immediately below the original floors of the first Palace we find, as under the Olive Press Room, the finest products of the 'Middle Minôan' Ceramic Style. It seems probable that this phase was still existent at the time of the foundation of the Later Palace. It even appears that the pictographic characters of seal impressions found in the deposits below the original floors of the Later Palace are somewhat more archaic than those of the Magazine containing the clay documents of this class. This fact seems to weigh in favour of the second hypothesis mentioned in the text, that this pictographic deposit, namely, was covered in owing to some alteration of structure that took place soon after the foundation of the Later Palace. It may be possible to describe the last phase of the culture of the Earlier Palace as 'Middle Minôan I.' and the first of the Later Palace as 'Middle Minôan II.'

the deposit above referred to of impressions of lentoid gems presenting curiously picturesque designs.[1] In the Middle Minôan stratum beneath the Olive Press Rooms the beginnings of this naturalistic style of engraving (see Fig. 9) are already perceptible, though no example was there discovered so advanced in character as some of those from the other deposit.

Side by side with these there also came to light other decorative sealings impressed from exceptionally large matrices. An example of one of these is given in Fig. 10. These very broad signets seem to have been characteristic of this period of Minôan art. Specimens of the same kind also occurred in the early basement of the South-East Quarter.

§ 6.—The Deep Walled Cells and the Stratification of the North-West Palace Quarter.

Further exploration of lower levels in the North-West Quarter of the Palace have led to very important stratigraphical results. The deep walled pits or cells, two of which were partially excavated in 1901,[2] have been more completely investigated, and six of these dungeon-like chambers have now been brought to light and to a great extent cleared out. From the plan of these, as will be seen from Fig. 11, it has now become clear that these structures have no systematic connexion with the Later Palace. Their main axes for the most part run directly athwart those of the later building, and the presence of these walled pits, going down in each case nearly twenty-five feet, had evidently caused considerable trouble to those who carried out the new constructions. In order to obtain secure support for the walls now drawn across the earlier lines, it was found necessary to carry down their foundations in many cases to the original floor-level of these deep cells.

Of these cells No. 1 has now been completely cleared out, and, to render this clearance possible without destroying the history of the building by removing the later walls, I resorted to the expedient of removing only their rubble foundations and supporting their upper structure by means of arches thrown across the earlier cells. The general aspect of the

[1] *Report*, &c., 1902, pp. 62, 63; *Myc. Tree and Pillar Cult*, p. 31, Fig. 17. See too below, p. 88, Fig. 60.

[2] *Report*, 1901, p. 35 *seqq.*

chamber thus cleared may be gathered from Fig. 12, and it will be seen that the rough masonry of which the walls are constructed bears a considerable resemblance to that of the early basement room shown in Fig. 7 above.

That these deep cells go back to a very early period is shown by several pieces of evidence. The earth with which the pits had been filled

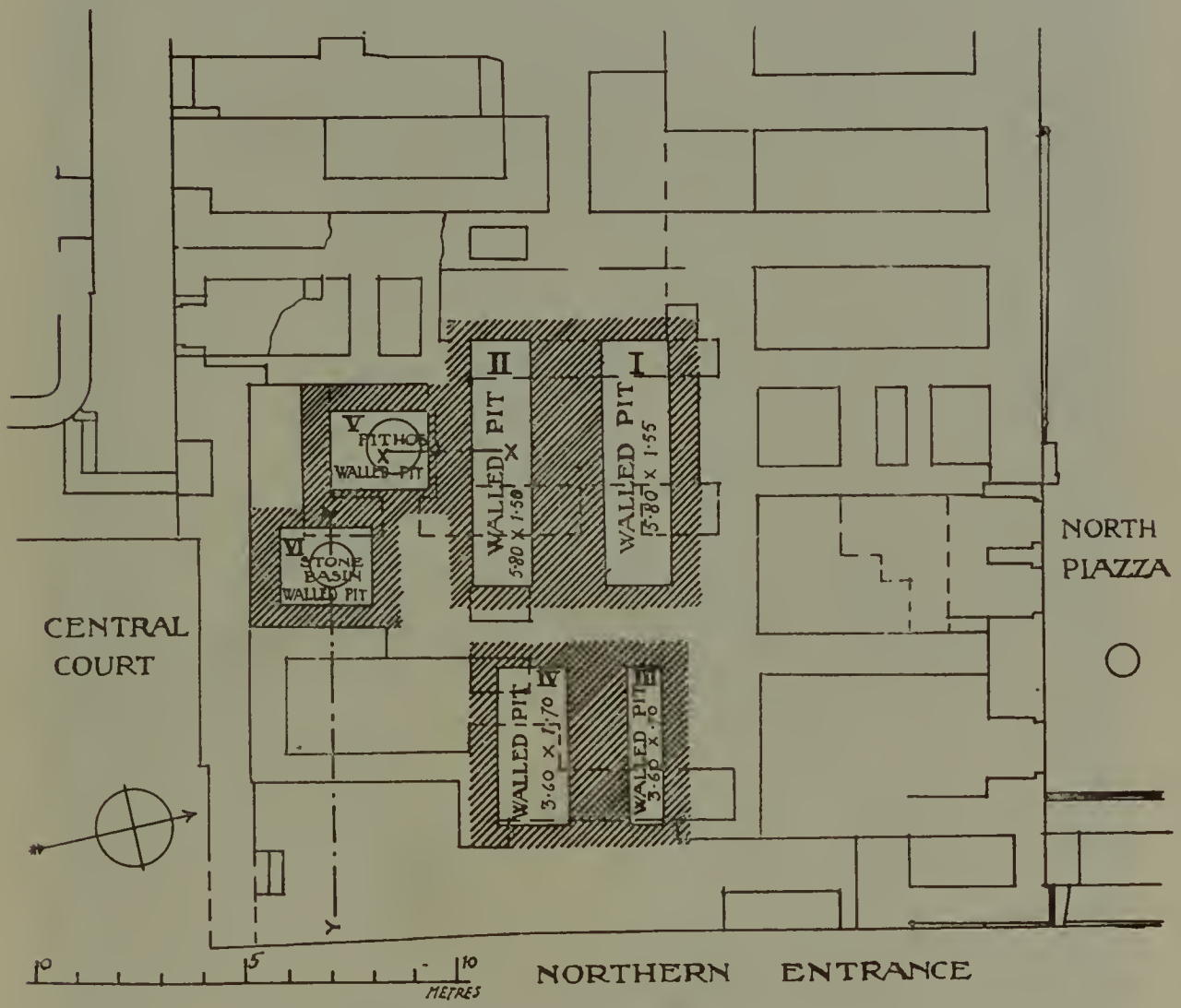


FIG. 11.—PLAN SHOWING DEEP WALLED CELLS OF EARLIER PALACE.

up, though generally devoid of relics with the exception of fragments of smooth red-faced plaster, contained some Middle Minôan pot-sherds. The whole system of these structures is, as shown above, quite independent of

Fig. 12.—Deep Walled Cell of Earlier Palace.

those on the higher level. Finally, the floor-levels above are proved by their contents to belong to three distinct periods, the earliest of these apparently answering to the first period of the Later Palace.

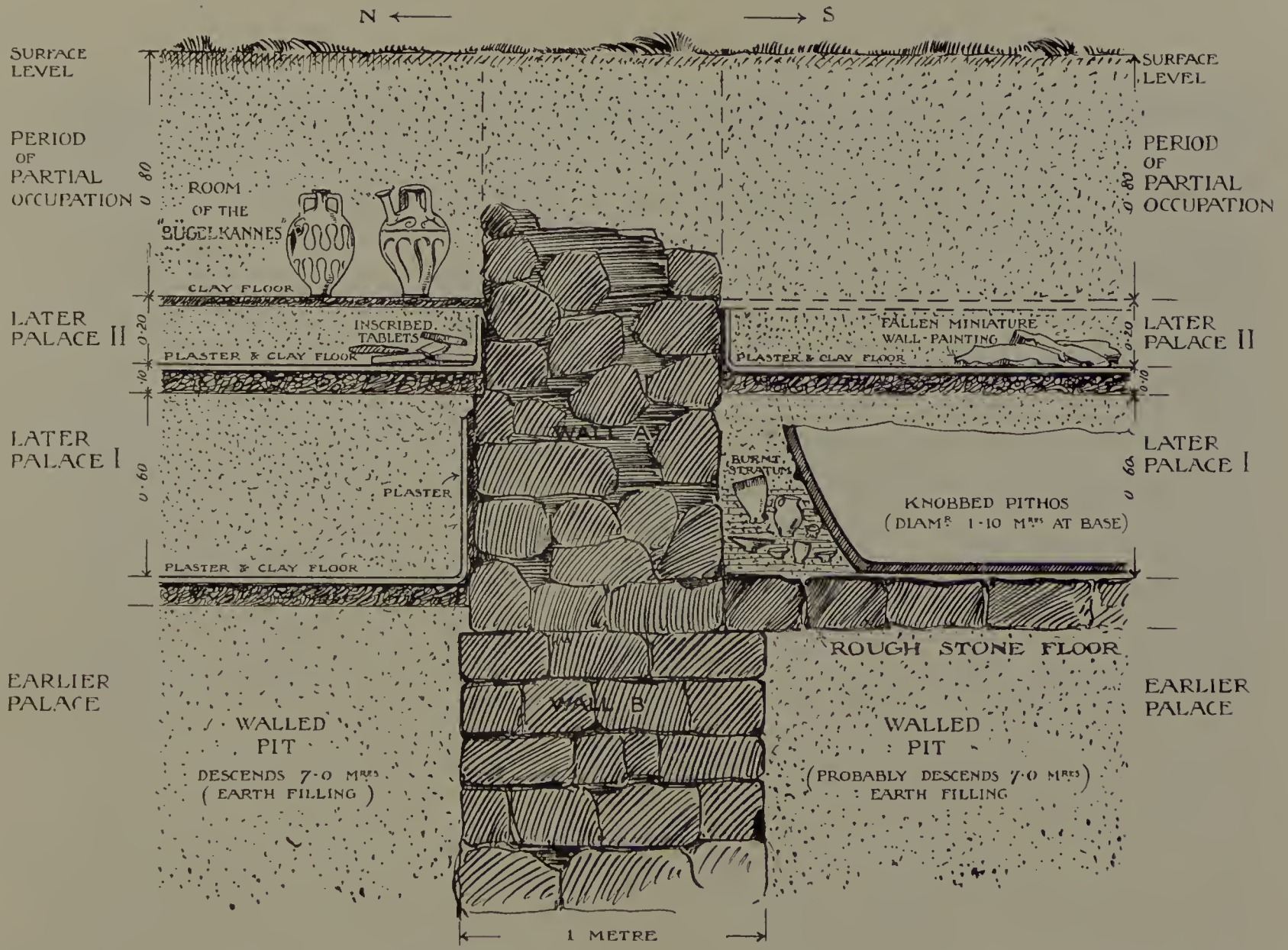
Very interesting data for the stratigraphy of the later structures was afforded by the area about the Room of the Lotus Lamp excavated in 1900. Throughout all this region two Later Palace floor-levels corresponding with its first and second periods are traceable, and in places again above these, as in the case of the Room of the 'Stirrup-Vases,' a slightly higher floor belonging to the period of partial habitation.

During the first year's excavation only the two upper of these floor-levels were laid bare. Further investigation has now shown the existence of a lower floor-level dating from the first period of the Later Palace, and below that again two deep walled pits of the earlier building.

The succession of periods is indicated by the section (X—X on plan) given in Fig. 13. Here wall A dating from the foundation of the Later Palace rests on wall B, which acts as a partition between two deep walled cells of the earlier period. On either side of wall A are three floor-levels answering respectively to the first and second period of the Later Palace and to the decadent 'Mycenaean' period when the site was only partially occupied.

This latest period of occupation is well represented by the floor-level on the left. Here on a clay floor about 80 centimetres below the surface of the ground, which was in this area a threshing-floor, stood 'Stirrup-Vases,' plain clay amphoras, and other late types of vessel. Beneath a clayey deposit, at a depth of about 20 centimetres below the later level, was another floor, of plaster and clay, which finds its corresponding section to the right of wall A. Upon this floor-level, which answers to the second period of the Later Palace, were found, to the left of the dividing wall, clay tablets with advanced linear script, and, to the right, near an opening between later walls resting on this floor, fragments of stucco with painted designs in the miniature style and belonging to the same cycle as that delineating the pillar shrine.

Beneath this second flooring, which had a thickness of about 10 centimetres, was an earlier stratum 60 centimetres deep, the character of which was clearly defined by the ceramic relics found immediately above its floor, in an earth layer full of carbonised remains. On the floor itself, which was composed of rough stones, stood the lower part of a



SECTION LOOKING EAST
(ON LINE X-X — SEE PLAN)

FIG. 13.—SECTION ABOVE DEEP WALLED CELLS SHOWING LATER FLOOR-LEVELS

great *pithos*—1·10 metre in diameter—of the same early class as those of the Eastern Magazines and displaying a similar knob-bed decoration. Its rim has been deliberately broken away during the levelling process which preceded the laying down of the later pavement above. Beside the remaining part of this huge *pithos*, in the same carbonised stratum, lay several small vessels of somewhat rude fabric. Amongst these was the fragment of the rim of a large jar showing white spirals on a black or reddish-brown ground and recalling the typical decoration and contour of certain vessels from the Plaster Closet[1] belonging to the penultimate period of the Palace, as well as of others from the Repositories of the early shrine to be described below.[2] A cup with a 'matt' brown band on buff slip and some small crucible-like vessels with three feet, showed close approximation to types of the preceding Middle Minôan Period.

Below the rough stone flooring on which the *pithos* and the other remains rested lay the earth filling of another deep-walled pit, probably like that on the other side of wall B, descending about seven metres.

The section (Y—Y on plan Fig. 14) of the neighbouring area, drawn from East to West, affords an instructive comparison with that shown in Fig. 13 above. The stratification is essentially the same, except that there is here no floor-level

[1] *Knossos, Report*, 1902, p. 87 *seqq.*

[2] See p. 49 *seqq.* and Fig. 26.

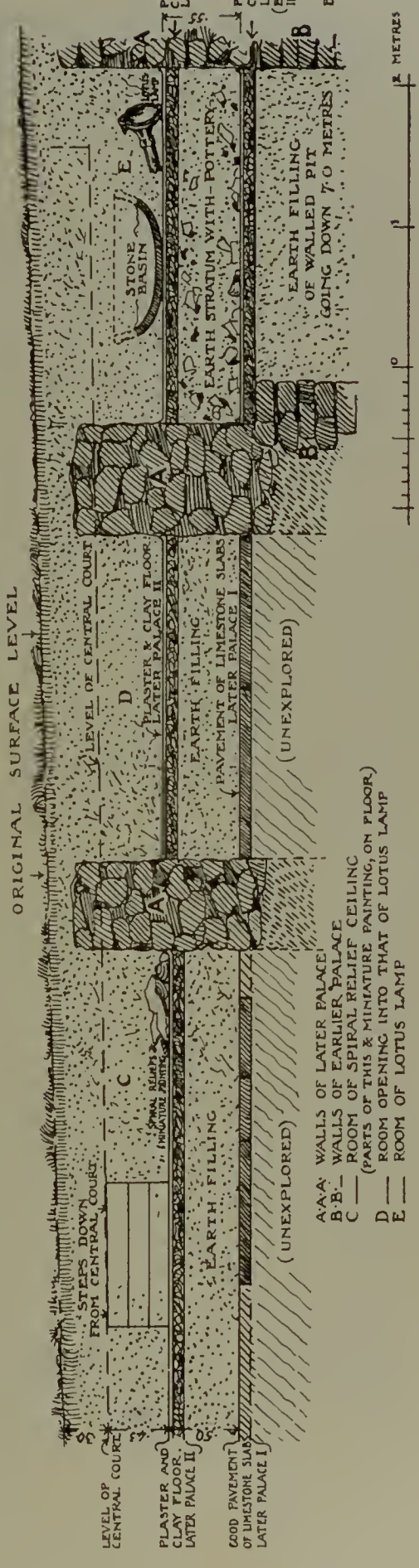

ORIGINAL SURFACE LEVEL
LEVEL OF CENTRAL COURT
STEPS DOWN FROM CENTRAL COURT
PLASTER AND CLAY FLOOR LATER PALACE II
PLASTER & CLAY FLOOR LATER PALACE II
EARTH FILLING
PAVEMENT OF LIMESTONE SLABS LATER PALACE I
(UNEXPLORED)
STONE BASIN
EARTH STRATUM WITH POTTERY
EARTH FILLING OF WALLED PIT GOING DOWN 7·0 METRES
PLASTER AND CLAY FLOOR LATER PALACE I (BURNT STRATUM IMMEDIATELY ABOVE)
EARLIER PALACE
METRES
A-A-A WALLS OF LATER PALACE
B-B- WALLS OF EARLIER PALACE
C — ROOM OF SPIRAL RELIEF CEILING (PARTS OF THIS & MINIATURE PAINTING, ON FLOOR)
D — ROOM OPENING INTO THAT OF LOTUS LAMP
E — ROOM OF LOTUS LAMP
SECTION LOOKING SOUTH
(ON LINE Y-Y)
SEE PLAN

FIG. 14.—SECTION SHOWING FLOOR-LEVELS OF DIFFERENT PERIODS: NORTH QUARTER OF PALACE.

corresponding to the later period of partial occupation, represented in the other section by the Room of the 'Stirrup-Vases.' This is one of many indications of the sporadic character of that occupation.

The uppermost floor-levels here, in all cases of clay or rough cement and plaster, belong to the second period of the Later Palace. That of Room C, indeed, bore upon it some of the most distinctive artistic products of the last great age of Knossos in the shape of the remains of the painted stucco ceiling with spiral relief, and of the miniature wall-paintings. The floors of this Later Palace period, as seen in C, D, and E, are all practically of the same level, about 40 centimetres below the paving of the Central Court, from which, in the case of Room C, access was afforded by means of three descending steps.

In this Section too we see a lower and original floor-level of the Later Palace with an intermediate stratum between it and the more recent floor-level, somewhat less in thickness (50 as against 60 centimetres), than that which occupies a corresponding position in Fig. 13. This flooring in the spaces below C and D is composed of good limestone slabs. In E, on the other hand, it is composed of plaster and a kind of clay cement with a burnt stratum immediately above it containing small rough vases like those associated with the large *pithos* in Fig. 13. Below this layer in turn there is in this case too a deep walled pit belonging to a still earlier Palace.

§ 7.—'Kaselles' of the West Magazines and Discovery of those of the Long Gallery.

The supplementary exploration carried out in 1901 of the 'Kaselles' (Κασέλλαις) or Stone Cists along and under the paved floors of the Western Magazines had already supplied evidence of the partial or entire closing of these in the course of the history of the Later Palace.[1] In some cases the original depth of the cist has been reduced by the construction of a new bottom at a higher level. These upper receptacles were as a rule found open, having been apparently provided at most with a wooden cover. From the blackening of their walls and of the surrounding part of the Magazines it is clear that they had served in many cases as oil-vats. The remains associated with these upper receptacles, such as fragments of

[1] *Report*, &c., 1901, p. 44 *seqq.*

pottery in the advanced Palace style, show that they were in use during the latest Period of the building. In the Eighth Magazine alone even the uppermost of the two receptacles was entirely closed in by a pavement which showed no superficial cists.

The closed lower section of several of these receptacles contained in certain cases pottery with white spiraliform designs on a dark ground, of a type which we now know to be characteristic of the close of the first period of the Later Palace. A broken fragment of masonry found with pottery of this character in the lower part of a cist in the Fourth Magazine was incised with a Double Axe sign [1] of the same calibre as those seen on various blocks of this and other Palace regions; an indication that the masonry thus marked also belongs to the First Period of the Later Palace.

This latter piece of evidence has a special value in relation to a discovery of the present season. In Magazines Nos. 7 and 9, projecting respectively from their North and South walls, are two square buttresses constructed of rather small blocks of good limestone masonry. It was now made clear that both of these buttress-like blocks of masonry, which seem to have been made in order to support the pillars of an upper hall, were additions to the original plan of this part of the building, dating from a comparatively late period in its history. Both of these piers were built into and over Kaselles belonging to the original structure, the lower part of which had been filled in with compact masses of foundation blocks. In Magazine 7, above these foundations, in the earth-filling between the walls of one of these cists and the lower part of the pier, was found part of a vase in the late 'Palace Style.' The pier of Magazine 9 showed on one of its blocks a small and finely cut asterisk or eight-rayed star sign, of a character strongly contrasting with the larger and more deeply incised signs of the earlier period, such as the Double Axe mentioned above. We have here another interesting indication of the chronological value of the different classes of signs found on the Knossian Palace blocks.[2] As doubtless is the case with most of these signs, the asterisk was not intended to be visible, for there were traces of painted stucco adhering to the surface of the stone pier.

The contents of the closed lower section of several Kaselles in the Western Magazines opened this season supplemented the evidence already obtained from the same source. Here, together with the usual filling

[1] See *Report*, &c., 1901, p. 47.

[2] See above, p. 13.

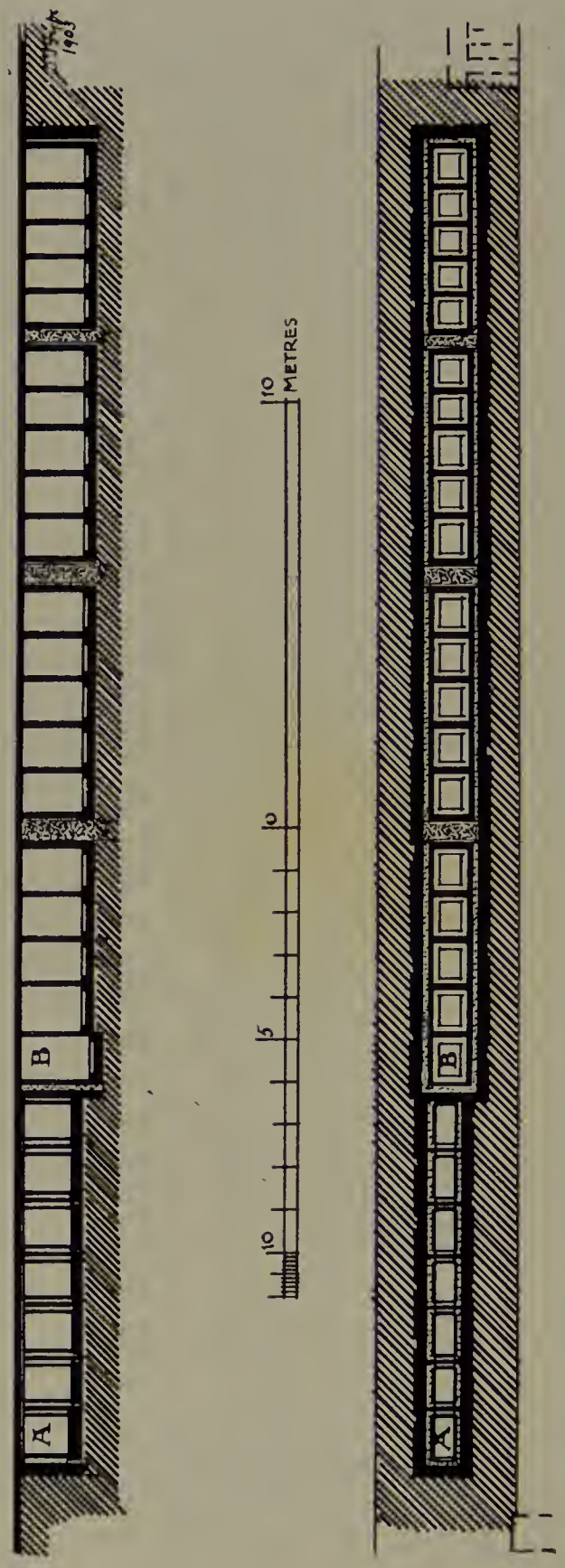


Fig. 15.—Plan and Longitudinal Section of 'Kaselles' in Long Gallery.

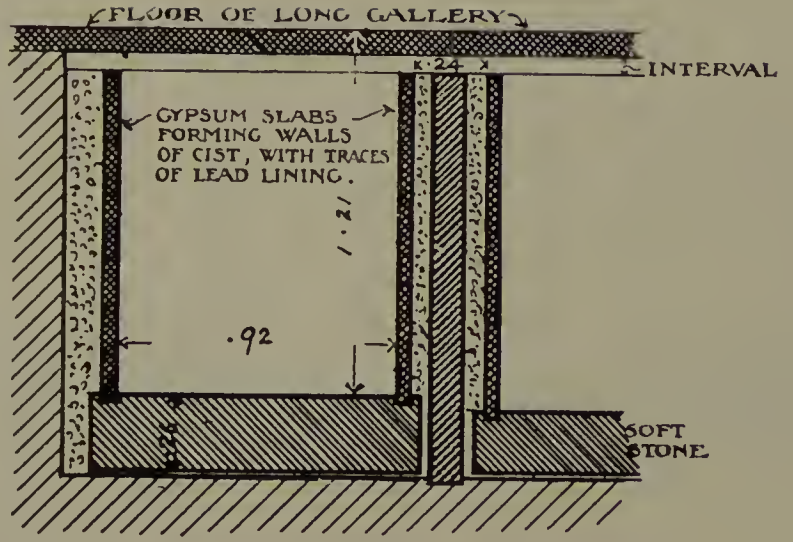
material of earth and rubble, were found numerous pieces of gold foil, pointing to the deposit of precious objects in these cists at the time of their original construction. Fragments of inlays composed of a native faïence also occurred, and in two cases bronze handles like that shown in Fig. 24 below. Finds of this character were shortly to receive some more striking illustrations.

The fact that in the Eighth Magazine the Kaselles had been entirely concealed by a well compacted pavement, made it seem desirable to remove some of the paving-slabs of the Long Gallery in order to ascertain if the same system extended on that side.

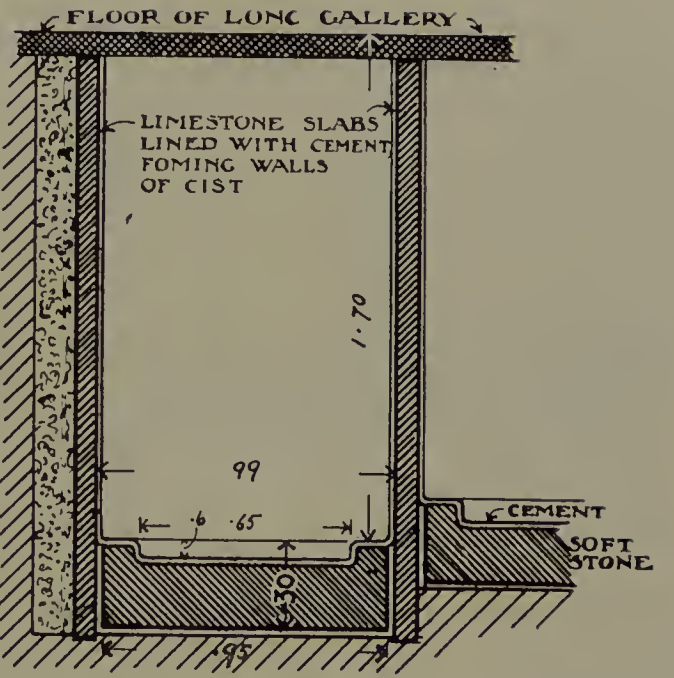
This examination led to the surprising result indicated by the plan and section in Fig. 15. It turned out that the greater part of the Long Gallery was underlaid by a continuous series of deep stone cists. These cists, which differed from those of the Magazines in that they consisted in every case of a single chamber, are twenty-seven in number and belong to two main classes—marked A and B in the plans and sections.

Type A, of which there is a series of seven, shows a narrower cell than the other, and at the same time a more elaborate design (see Fig. 16). This group, except for the absence of a horizontal slab, halfway down, dividing the Kasella into an upper and lower compartment, is identical with the cists of the Magazines. We see here the same elongated rectangular plan, and similar details of construction, such as the groove in the bottom slab into which the side slabs are fitted. There were also here found traces of the same lead lining. A remarkable feature of these cists is the systematic way in which their slabs are surrounded externally by a bed of red earth which, to a thickness of about 12 centimetres, intervenes between them and the retaining walls of masonry on either side, and to a lesser thickness between them and the more massive gypsum slabs that divide the Kaselles from one another. This red earth seems to have had particularly absorbent qualities and to have been placed round the slabs as a means of keeping off the damp. More rarely a backing of wood was found.

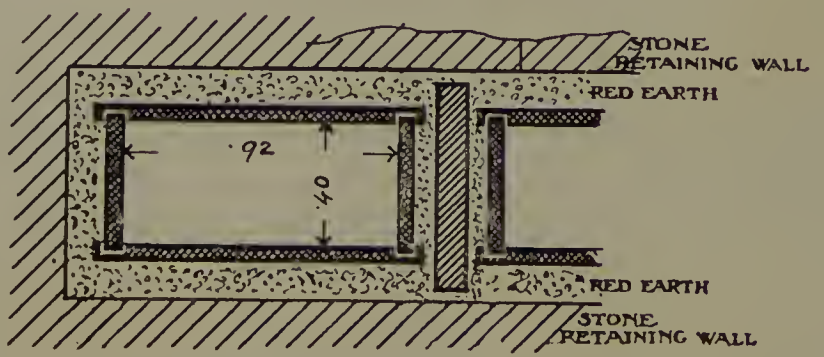
The Kaselles of Series A contained a good deal of carbonised wood and the usual remains of gold foil. In the cist opposite to the pier between Magazines 6 and 7 there occurred, in addition to this, some round and crescent-shaped plaques of the native faïence and others of bone for inlaying. In the cist opposite the door-opening of Magazine 6, more abundant remains of the same class were brought to light. Here was found a heap



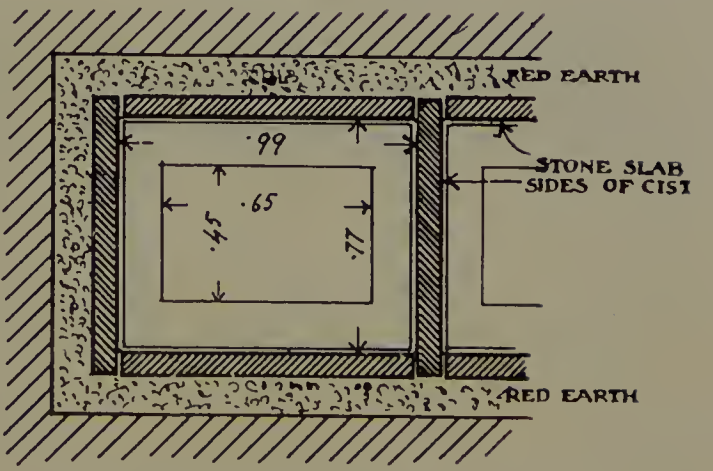
SECTION



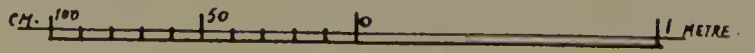
SECTION



PLAN OF CIST "A"



PLAN OF CIST "B"



SCALE FOR DETAILS

FIG. 16.—SECTIONS AND PLANS OF 'KASELLES' OF LONG GALLERY.

of carbonised wood, apparently parts of a chest, together with a large looped handle of bronze, numerous plaques of native faïence and crystal with which the chest had evidently been encrusted, and quantities of the usual gold foil. The crystal plaques had been much splintered by the action of fire, but the faïence inlays were better preserved. They were mostly of a purplish hue, some narrower pieces (Fig. 17), however, showing stripes of this colour on a greenish, white ground. The shape of the plaques will be seen from Fig. 17. It will be noticed that the most characteristic form shows triple projections with incurving sides, suggestive of their having been arranged in some such pattern as is shown in the figure. It is, moreover, evident that they were set in a rectilinear frame, since the plaques are in several cases cut off abruptly so as to present a straight end. Patterns of analogous character, but formed of combinations of quatrefoil instead of trefoil units, appear on the embroidered robe of the Cupbearer and again in the decorative wall-paintings of the Palace. It looks as if such designs had been taken over into other branches of Minôan art from existing models in faïence mosaic. An exceptionally large porcelain plaque of the quatrefoil type was in fact found near the North-East border of the Palace. In the painter's or embroiderer's art such designs are derivative : in that of the inlayer they are at home.

The gold foil here was most abundant, and it was noticeable that in several cases it was found folded over the faïence plaques, as if some at least had been originally coated with it. Many plaques were also covered with minute grains of melted gold.

A fragment of a *pithos* of ordinary Late Palace character, found in the upper part of this Kasella, shows that its final closing, due to the construction of the pavement above, took place at a comparatively late period. It is probable however that the remains of the inlaid chest must be referred to the first Period of the Later Palace.

The cists of type B (Fig. 16) are squarer in plan and more capacious than those of the preceding class. They are also more numerous, being symmetrically arranged in four groups of five, each group separated from the next by an interval filled with the usual red earth.

Their depth is greater than those of the other series, being about 1·70 to 1·45 metre as against 1·21. They also exhibit certain structural differences. The side slabs which are here of limestone instead of gypsum, are not, as in the other cists, set in grooves worked in the bottom slab, but

pass outside it. A shallow rectangular cavity had in each case been cut out of the surface of the bottom slab. A similar interval had been allowed

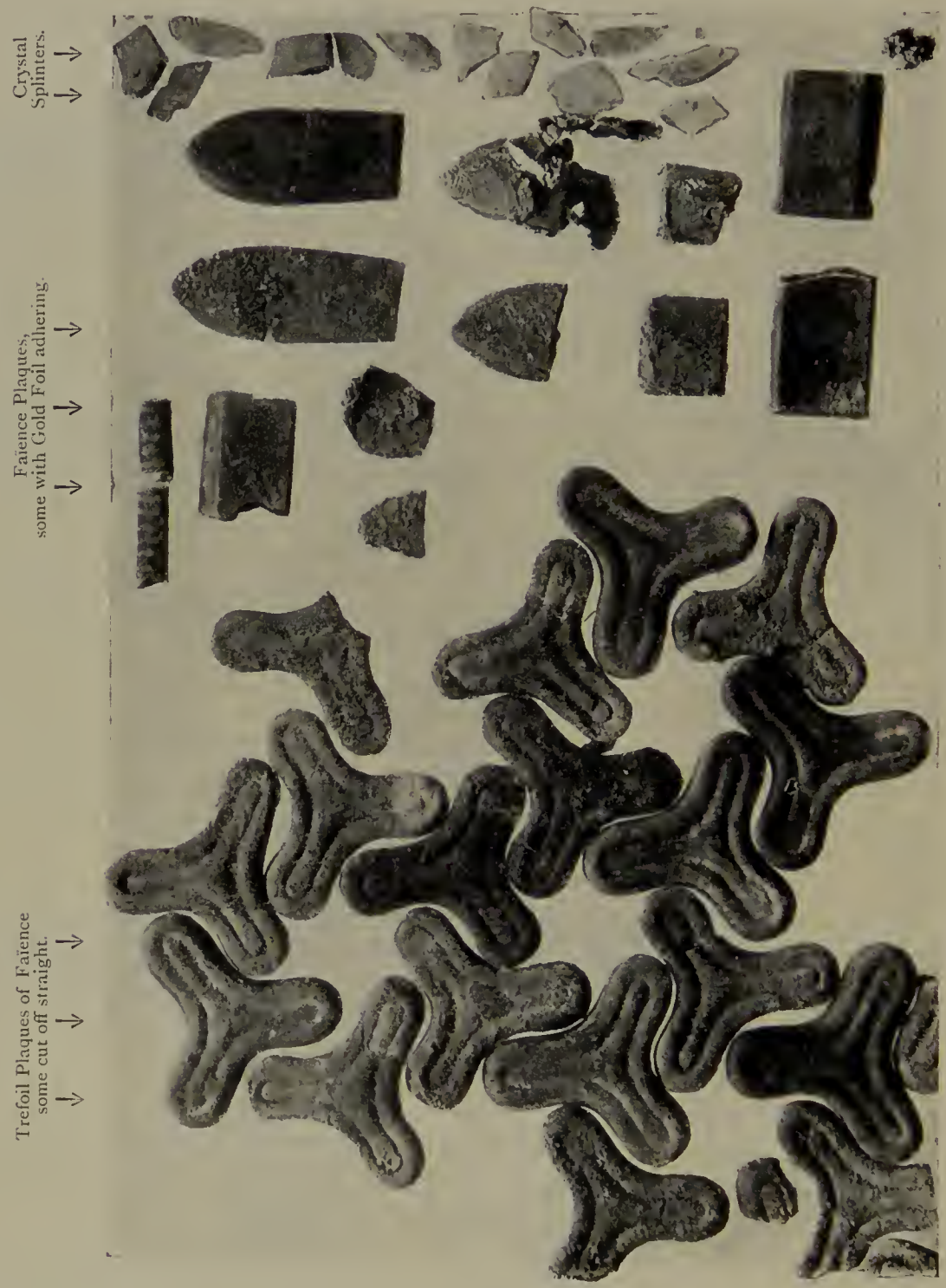


Fig. 17.—Faïence Plaques for Inlaying from 'Kasella.'

between the actual cist and the supporting walls around as in the case of Class A, and filled with the same red earth as a protection against damp.

On the other hand, between one cist and another, plain dividing slabs were substituted for the more elaborate arrangement seen in the other series. The cists of Class A had been originally, as in the case of those of the Magazines, provided with a lead casing. In Class B, the whole interior was coated with hard white plaster or cement, this cement lining being no doubt necessitated in the case of the cists of this class by the less compact character of their framework.

The Kaselles of type B presented indications of having remained in use to a later date than the other series.

In the case of Class A the cists were largely occupied by a deposit full of carbonised remains containing objects, such as the faïence inlays, which seem best to answer to the First Period of the Later Palace, and to bear the usual mark of the violent catastrophe and conflagration which seems to have brought it to a close. In this case the Kaselles, robbed of such precious objects as could be extracted, were apparently left choked with the earlier débris till the time when they were finally concealed by the construction of the pavement above.

But the Kaselles belonging to Class B showed much less trace of carbonised remains or of earlier relics. They contained a mere filling of white limy earth and rubble which seems to have been heaped into them at the time when the pavement was made. In this filling were found scattered fragments of pottery belonging to the Latest Palace period, and some plain bowls filled with lime. The two cists nearest the stairs at the North end of the Long Gallery were found open and contained fragments of still later pottery belonging to the Period of Partial Occupation.

§ 8.—THE CENTRAL PALACE SANCTUARY.

Taken as a whole the West Central Palace region had afforded some special indications of a religious connexion. The unique sanctity of the Double Axe in Minôan Crete—of which the actual scene of worship depicted on the sarcophagus of Hagia Triada has afforded a new and astonishingly complete illustration[1]—had already led me to attach a religious importance to the repetition of this sign on the two stone pillars that are

[1] A preliminary notice of this is given by Dr. R. Paribeni, *Lavori eseguiti &c. nel Palazzo di Haghia Triada dal* 23 *Febbraio al* 15 *Luglio* 1903 ; p. 30 *seqq.*

the leading feature of this region. The fact that at least in the latest Palace Period they also served a constructive end as 'Pillars of the House' does not, as has been shown elsewhere, militate against this view. The discoveries of analogous pillar rooms in separate houses, such as the Palace dépendances brought to light this year,[1] tend to confirm it. On the other hand, the exceptional distribution of the Double Axe sign on the blocks of the Western Palace wing, coupled with other circumstances, seems to mark out a certain definite area of this region as consecrated to a religious usage. The same fetish emblem is in fact the special sign of the first six Magazines, which stand in immediate connexion with the system of small chambers and passages immediately surrounding the Pillar Rooms. It is also the distinguishing sign of the gypsum slabs that form the inner lining of the section of the West Palace wall that backs this series of Magazines. It seems not improbable therefore that these Magazines served in a special way as treasuries and storehouses of a sanctuary. An indication indeed of peculiar sanctity may be taken to be supplied by the fact that an altar-base was placed close to the outer wall in this part of the Western Court, immediately against a small niche outside the end of the Fourth Magazine.

It is further to be observed that the Western-most series (A) of the Kaselles of the Long Gallery,[2] which certainly contained treasure, corresponds to this particular section of the Magazines. East of this section, as already shown, the character of the Cists in the Long Gallery changes, implying a different application.

To the South the Pillar Room area is immediately flanked by three small Magazines of early character where the characteristic sign is the cross pattée to which the discoveries to be described below seem to add a new significance. It is moreover shut in on this side by a small court in the centre of which is another altar-base. It should further be borne in mind that in a small square chamber near the East Pillar room was found a deposit of stone vases which seem from their material and weight better adapted for ritual or ceremonial usage than for the purposes of ordinary life. Two of these indeed by their form suggest certain typical concomitants of Minôan cult. The marble fountain spout in the shape of a lioness's head stands naturally in relation to the lion guardians of the divine pair, or of their bætylic column, as seen on the seal impressions, signets, and other monuments. The alabaster vase in the shape of a Triton shell recalls its ritual

[1] See p. 9 and p. 149 *seqq.*

[2] See above, pp. 31–33.

usage by a worshipper as represented on a gem found in the Idaean Cave,[1] as well as the association of clay models of the same conch-shell with the remains of the little terracotta Sanctuary found in an early basement on the East side of the Palace.[2]

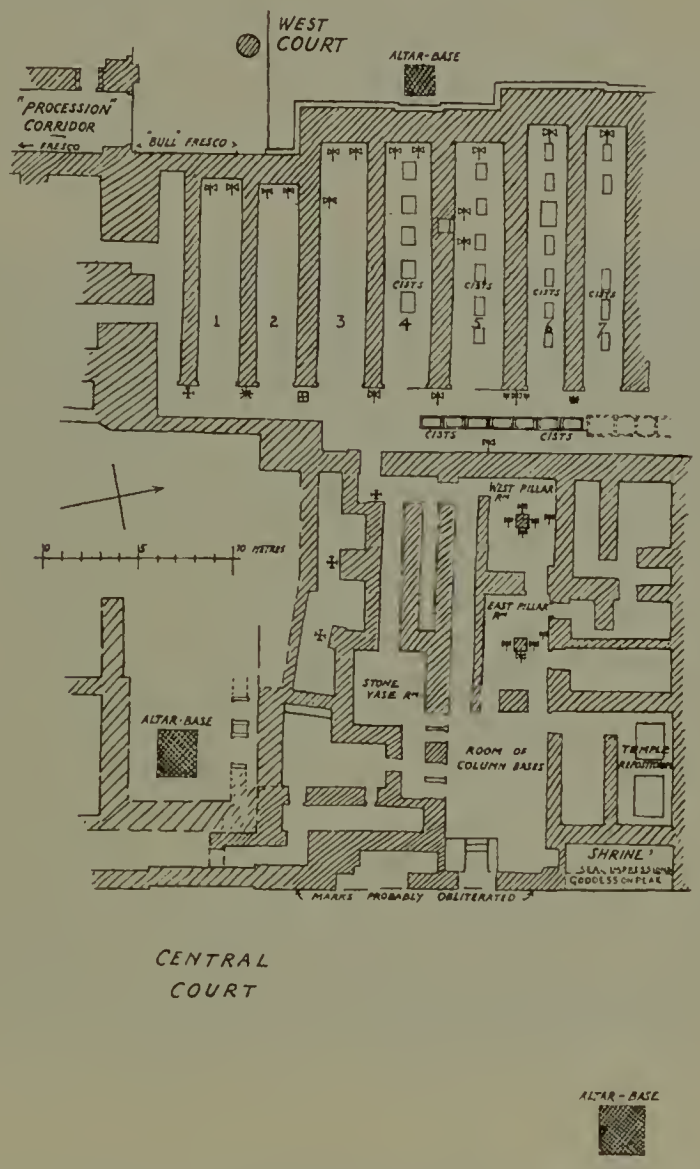


FIG. 18.—PLAN OF WEST CENTRAL SECTION OF PALACE WITH ALTAR-BASES AND SANCTUARY.

Immediately South of the Room of the Column Bases which forms the Antechamber to the Pillar Rooms is a rectangular recess facing the Central Court. In this recess was discovered in 1901 a series of seal impressions representing an armed Goddess on a rocky height guarded by lions with a worshipper in front of her and a pillar shrine behind, recalling in a somewhat

[1] *Myc. Tree and Pillar Cult*, p. 44 Fig. 25.

[2] *Report, &c.*, 1902, p. 32.

simplified form the temple of the miniature wall-painting. I was even led to suggest that this discovery gave a clue to the actual position of the temple façade shown in the painting, since the basement blocks seen below it and the crowds in an open space in front made it probable that the original of the shrine thus depicted was reared on the side of a Court.[1] A further circumstance brought out by the last season's explorations has considerably enhanced the probability that there was here at least part of the façade of the most important of the Palace sanctuaries. For, in the middle of the Central Court immediately opposite this recess, there have now been brought to light parts of an altar-base apparently of larger dimensions than any yet found within the Palace Courts.

The rectangular West Central Section of the Palace, of which the Pillar Rooms form the centre and which is taken as including the Magazines with the Double Axe sign, is thus found to have an altar-base in front of it on each of its three open sides, see Plan, Fig. 18.

The accumulated evidences above referred to seemed to point to the fact that this whole section of the Palace represented according to the original plan an extensive sanctuary and its dépendances. The existence of minor shrines such as that of the Double Axes in the North-East Quarter, the religious symbols found in the North-West Building,[2] and the constant reference to religious themes traceable in the seal-types, miniature paintings, and terracotta models, as well as the votive double axes and other objects found within the Palace, make it more and more probable that there was a sacerdotal as well as a royal side to the Minôan dynasts of Knossos.[3] It would seem that there were here, as in early Anatolia, Priest-Kings; and old tradition, that made Minôs son and 'Companion' of Zeus and a Cretan Moses, is once more seen to have a basis in fact.

§ 9.—The Great Stone Repositories of the Central Palace Sanctuary.

The presumed existence in this quarter of the Palace of a considerable Palace sanctuary with its dependencies made it desirable to subject the

[1] *Report, &c.*, 1901, p. 30.

[2] See below § 18.

[3] I observe that this conclusion, which I have already insisted on elsewhere, has been advanced independently by Mr. Cook in his interesting monograph on 'Zeus, Jupiter, and the Oak' (*Classical Review*, Nov. 1903, pp. 409, 410). Mr. Cook rightly points out the religious importance of the Lily Crown as seen in the painted relief found in the South wing of the Palace.

floors of the small chambers about the Pillar Rooms to the same searching examination as those of the Long Gallery. Might there not here too lie concealed beneath the pavements earlier repositories belonging to the Palace Shrine?

Immediately behind the rectangular recess where had come to light the sealings representing the lion-guarded Goddess and her pillar-shrine is a small chamber which in the state in which it was first opened out showed every characteristic of the latest period of the Palace. Its walls

FIG. 19.—SUPERFICIAL CISTS IN PAVEMENT OF CHAMBER NEAR EAST PILLAR ROOM.

were covered with stucco painted white with red bands, forming a kind of frieze and dado in the same manner as the walls of the West Magazines and Long Gallery. From the occurrence of two shallow superficial cists or stone vats in its pavement, which were lidless and open (see Fig. 19), and the remains of some clay *pithoi* of the usual late character, it seemed to have been used during the concluding period of the building for the storage of oil.

Noticing a slight depression in the pavement in the East section of the room I had some slabs raised, and it was then discovered that instead of

reposing on the neolithic stratum, which forms the usual bed of the pavement hereabouts, they were underlaid by comparatively loose earth. Further exploration showed that we had to do here with an exceptionally capacious cist or large stone repository containing a variety of relics belonging to the conclusion of the first period of the Later Palace, and many of which for beauty and interest equalled and in some respects surpassed anything found during the whole course of the four seasons' excavations.

The contents showed a distinct stratification. The surface earth of the deposit was of a reddish terracotta colour due to the action of fire through the floor, the presence of oil in the chamber above having no doubt rendered the conflagration here intensive. Deeper down the earth was darker, with an intermixture of rubble and charred wood together with some fragments of gold foil. From the surface of the deposit downwards to a depth of about 1·10 metre, there lay closely packed together a quantity of vases, the two prevailing types being the amphora and the pitcher.

As will be shown below, those of indigenous fabric presented for the most part white spiral designs on a dark ground, and answered to vases of the kind found in the closed lower section of the Kaselles in the Fourth Magazine, and in the Plaster Closet of the South-Eastern Quarter, belonging to the end of the first period of the Later Palace. Among those of the other class, with brown decoration on a buff ground, it will be seen below that some at least were imported.

At about 1·10 metre down a change took place in the character of the deposit. The pottery ceased, and the earth grew fatter and more compact. In this stratum, which lay, to a depth of about 42 centimetres, immediately above the floor of the repository, abundant fragments of faïence began to come to light together with other perfect objects of the same material. The whole, as will be shown in more detail below (see §§ 13, 14), formed a wholly unique collection of *objets d' art*, executed with extraordinary skill in this indigenous kind of porcelain, the fabric, but not the forms of which must have been learnt from Egypt. This faïence series included figures of a Snake Goddess and votaries, their votive robes and girdles, cups and vases with painted designs, flowers, fruit, foliage, and shells in the round, small reliefs of cows and calves and wild goats with their kids, a variety of plaques for inlaying, and quantities of beads.

Among the other relics were an ivory handle and inlays, bone plumes of arrows, doubtless of a votive character, the usual gold foil, a clay tablet and roundels, presenting inscriptions of a linear class different from that of the later period of the Palace, numerous clay seal impressions, many of them of a religious character, and a marble cross of orthodox Greek shape.

An apparently sacrificial element was represented by some remains of stags horns, and the greasiness of the deposit, which attained its maximum immediately above the floor, was also possibly due to the presence of animal matter. The burnt corn also found in some abundance may have also had an offertory character.

Significant in the same relation was the discovery in the same stratum of a series of steatite Libation Tables (see Fig. 20*a*, *b*, *d*, *e*). These receptacles, which taper gradually to a small base below, show on their

FIG. 20.—STEATITE LIBATION TABLES AND CAKE-LIKE OBJECTS[1] FROM TEMPLE REPOSITORY.

square upper face a shallow cup-like hollow with a raised rim. They exactly resemble the Libation Tables with a single cup found in the votive deposit of the Dictaean Cave.[2] This type represents a simpler variety of that with three receptacles, exhibiting the early linear inscription, beneath the same Cave deposit. It is interesting, moreover, to remark that the characters of the inscription on the Dictaean Libation

[1] For the probable meaning and composition of these cake-like objects (*c*, *f*, *g*, *h*, *i*, *k*, or Fig. 20) see below, p. 64.

[2] See Hogarth, *B.S.A.* vi. p. 114, Fig. 30 and Pl. XI. 2. A similar steatite 'Libation Table' was obtained by me from what appears to have been an early sanctuary at Arvi on the South coast of Crete (*J.H.S.* xvii. p. 357).

tables seem to belong to the same class as those seen on the clay document of the Temple repository with which we are at present dealing.

Fig. 21.—Sea-Shells, Artificially Tinted, from Temple Repository.

The steatite receptacles here found were distinctly smaller than those of the Cave Sanctuary, a fact which points to their having belonged to a shrine of diminutive proportions. The size of the figures of the Goddess

and her votaries would also point to a shrine only slightly larger than that of the Double Axes discovered in 1902.

In the latter case the cult objects and vessels of offering were placed on a flooring of rounded pebbles. In the small domestic shrine found in the South-East House we see waterworn sherds substituted for these. In the present case it looks as if the altar-base and floor of the Palace shrine to which the relics found in the present Repository belonged had been paved with more beautiful materials, though here, too, of aqueous origin. In addition to the objects already described, there were found an abundance of sea-shells which had been artificially streaked and banded with brilliant colours, the colouring, however, having been executed in a tasteful manner following natural lines (see Fig. 29). The colours used are vermilion and a more crimson red, orange, green, brown, and black. There is a strong presumption that the shrine had been paved with these bright tinted shells.

The shells, bushels of which were taken out, were the ordinary sea-shells of the neighbouring coast, cockles predominating. The following is a list of the varieties found [1]:—

Dolium galea
Trochus lineatus
Cardium edule
Pectunculus glycimeris
Spondylus gaederopus
Venus verrucosa
Venus multilamellata (?)
Mactra stultorum
Tellina (worn)
Tube of Serpulid worm and piece of an Echinid.

There were, as has been shown, two distinct strata in the Repository, the fatty layer containing the objects of art and cult, 32 centimetres in thickness, and above this the stratum 1·10 metre thick, in which the clay vases were packed. It is probable, therefore, that they were placed here at a time subsequent to the deposition of the other remains.

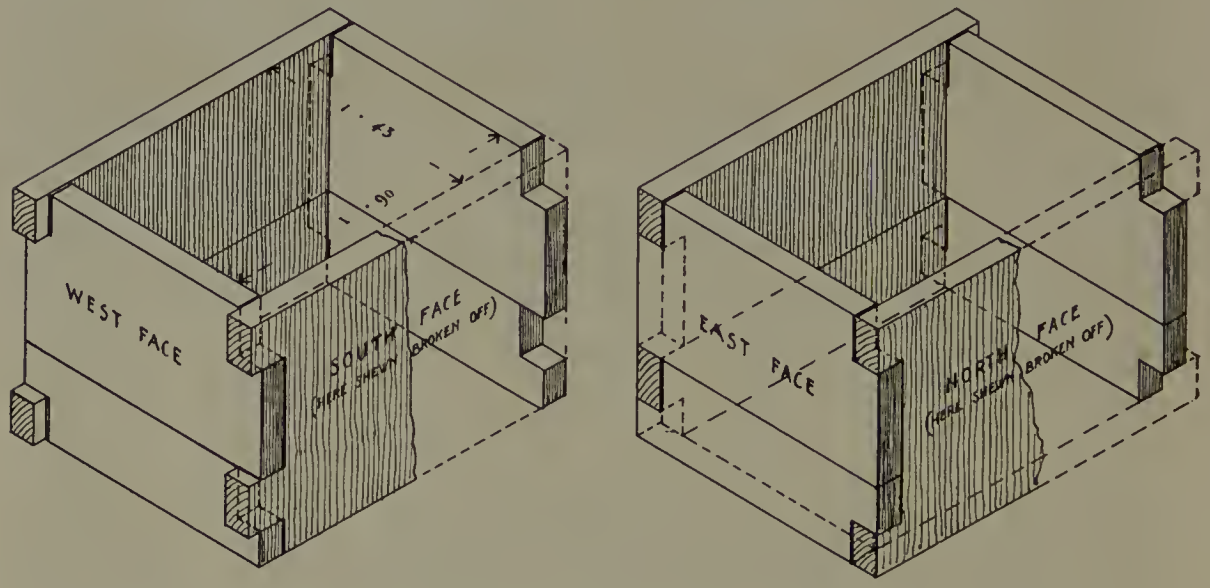
This first opened Cist (the East Cist of the plan, Figs. 22, 23) was

[1] The names have been kindly supplied me by Prof. W. F. R. Weldon, F.R.S., from some specimens submitted to him. The worn state of the valves in the case of one or two examples made it difficult to attach the specific name.

1·52 metre deep, 1·90 long, and 1·43 in breadth. It was composed of long slabs of hard grey limestone 16 centimetres thick, dovetailed or interlocked in the manner shown in Fig. 22.

With a constant thrust from the rubble backing behind, the framework thus put together acquired great stability. All joints were filled with cement and there were traces of a cement lining. The floor of the repository consisted of one large thick slab the upper surface of which was somewhat hollowed out.

On raising the pavement of the West Section of the room, a second large stone repository was discovered of still more massive construction



TWO DIAGRAMMATIC VIEWS OF EAST CIST, SHEWING INTERLOCKING JOINTS OF SLABS.

Fig. 22.

than the other. In order to explore this, the later superficial cist on that side, which had been built over it, had to be removed. The stratification here found, answered in every respect to that of the other Repository. Here too a surface layer of red burnt earth gave place to a darker bed filled with painted clay vessels of the same types as the others. Below this again was a stratum of fatty soil containing various relics. In contrast to the corresponding layer of the other cist, faïence objects were here wanting, with one notable exception—a missing part namely of the figure of a Snake Goddess just below her waist and showing a triple interlacement of snakes forming her zone. This circumstance pointed to

a considerable disturbance of the contents of the other depository at some period, and was probably due to plunderers at the time of what seems to have been the first great catastrophe of the Later Palace.

The amount of gold foil found in this stratum was greater than had

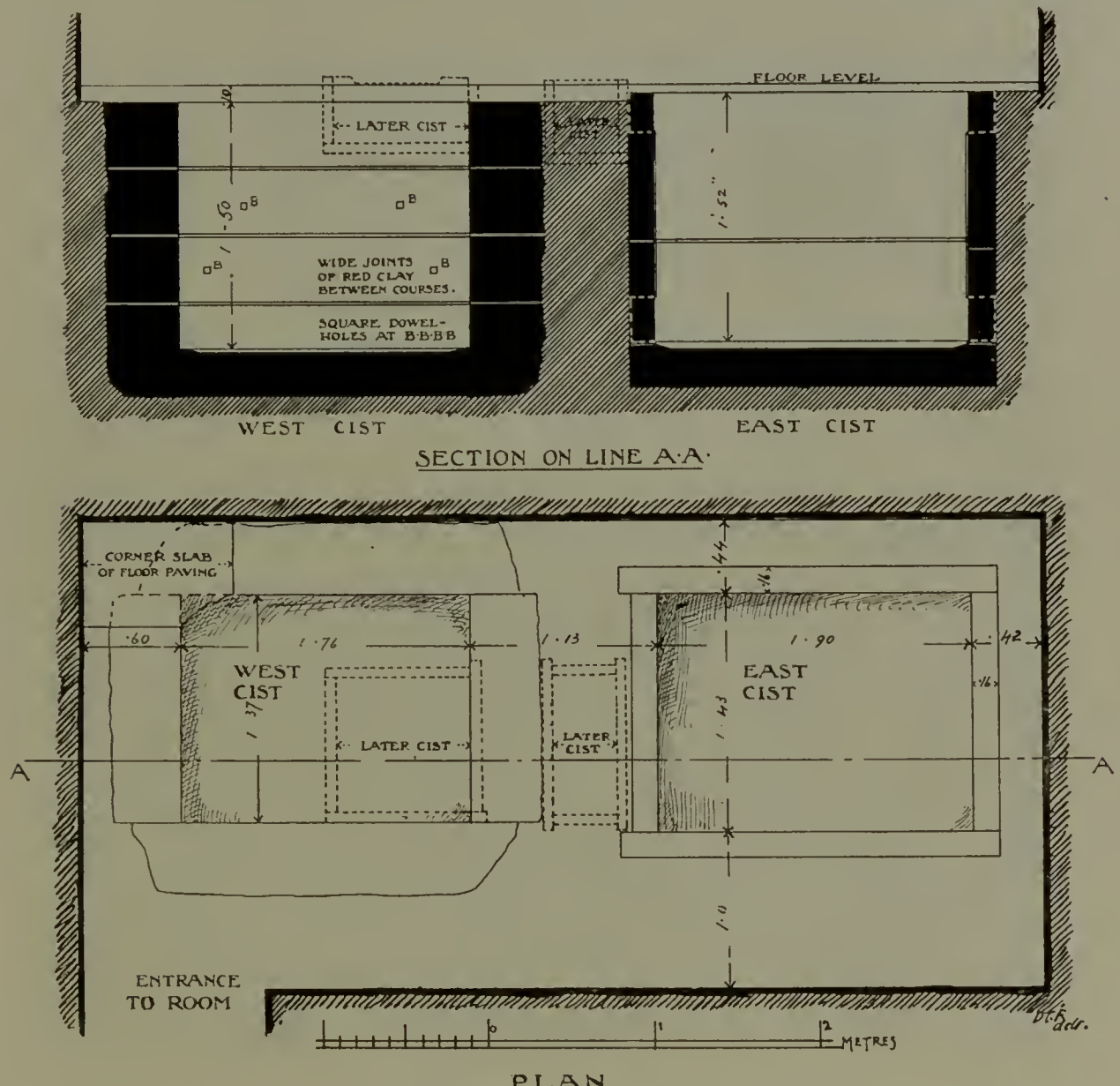


FIG. 23.—GREAT STONE CISTS : TEMPLE REPOSITORIES.

been yet found in any single spot in the Palace. It connected itself here, as in the case of the Kasella of the Long Gallery, with the carbonised remains of what seems to have been a large and very costly chest together with smaller caskets. From the fluting and traces of ornamental designs visible on some of this gold foil it was evident that it been used

as a coating of decorative reliefs. A piece of clay partly covered with gold leaf also showed traces of an elaborate design in relief apparently of circular form and recalling some of the thin gold disks found in the

Lump of Clay with Gold Foil and Impression of Design.
Bronze Handle.
Limestone Hammer (Fractured).
Bronze Clamp.
Ribbed Gold Foil.
Crystal Plaques some Backed with Silver Foil.
Gold Foil: some Petal-shaped Pieces above for Lining Plaques.

FIG. 24.—GOLD LEAF, CRYSTAL PLAQUES, BRONZE HANDLES, ETC., FROM WEST CIST.

Akropolis tombs at Mycenae. Other pieces of gold foil were cut out into leaf- or petal-shaped forms and seemed to have originally formed part of the setting of crystal inlays. There occurred indeed numerous petal-shaped plaques of crystal for intarsia work (see Fig. 24), perhaps origin-

ally arranged in a rosette-pattern. These crystal petals,[1] of which over a score came to light, were slightly hollowed out above, and in some cases they were partly enveloped with gold leaf. The under-side of one or two of them was coated with closely adhering silver foil—recalling the backing of many of the crystal inlays of the Gaming Board.[2] In one instance there was further attached to this a casing of gold leaf which seems to have been laid behind the silver foil to preserve it from oxidization, to which immediate contact with wood or ivory might have rendered it liable. A fine crystal disk 10·8 centimetres (over 4 inches) in diameter and slightly convex above was found, backed in the same way with silver foil. It must have belonged to an exceptionally large design, or may even have belonged to a mirror. Some of the crystal plaques were ribbed, a feature also reproduced by the Gaming Board.

There was also found here a bronze looped handle (Fig. 24) 15 centimetres broad and another of less dimensions apparently belonging to a smaller box. The bronze object (Fig. 24) with rivet-holes at its smaller end is possibly part of a clamp.[3]

In the same deposit, partly broken, lay a finely wrought perforated mallet of limestone. Had it perhaps been used for purposes of effraction by the plunderers of the Repository? It cannot be doubted that the inlaid and gilded chest itself had originally contained still more valuable objects in precious metal.

This Eastern Repository was built of much more massive blocks than the other, possibly because it contained gold treasure while the value of the objects in the other cist was more preponderantly artistic. In this Repository the walls are not mere slabs but consist of solid blocks of limestone masonry about 42 centimetres thick. With the exception of the uppermost course of the South wall which has two blocks, a single block goes the whole length of a side in every case. This masonry is in three courses, which rest all round on a lower course in a single piece with the bottom of the cist. As will be seen from the plan and section (Fig. 23) the interior capacity of this cist is slightly less than the other. It has an inner width and breadth of 1·76 and 1·37 metres, and is 1·50 metre deep. A remarkable feature is presented by the dowel-holes which are worked both in the sides and floor. They seem to point to a wooden frame-work.

[1] The crystal petals are 3·4 centimetres in length and 2·3 in breadth.

[2] See *Report*, &c., 1901, p. 78. It is 27·7 centimetres in length.

There can be no doubt that these stone repositories, which far exceed in size and solidity any cists yet discovered within the Palace, must be

Fig. 25.—The Temple Repositories as Opened Out.

regarded as part of the Treasury of the Central Sanctuary defined in the

preceding section. An idea of the two Repositories, as they appeared when opened out, with a few of the vases about them, may be gained from Fig. 25. It will be seen that the smaller of the two superficial cists (see Fig. 19) belonging to the later floor was placed immediately above the partition between the two Treasure Chambers, so that it has been possible to preserve it intact.

§ 10.—THE TEMPLE REPOSITORIES: PAINTED POTTERY AND IMPORTED VESSELS FROM MELOS.

As already noticed, the vases, of which some fifty more or less perfect examples were discovered in the great Stone Repositories, completely tally, so far as the indigenous fabrics are concerned, with the vessels belonging to the close of the First Period of the Later Palace found in the Kaselles of the West Magazines, the Plaster Closet, and elsewhere. We find here the same prevailing fashion of white designs on a dark or mauve ground,—usually broad spirals or vegetable forms. Characteristic types of vessel such as the two-handled amphora (Fig. 26*a*) and the pitcher with a raised ring round the neck and a broad-lipped mouth (Fig. 26*h*) and the somewhat high-spouted types, *c* and *e* are also here repeated. A good example of the broad white spiral and band decoration will be seen in *h* of the group here reproduced, while *d* shows, white again on a dark ground, a simple plant or grass design, which was to be taken over in a reversed technique by the potters of the succeeding Palace Period—the ground in that case being light and the decoration dark.

Side by side with these vessels, of which the great mass of those found in the Repositories was composed—and which reproduce the prevalent style of the ceramic class best described as 'Late Minôan I,'—are others showing a brown decoration on the light surface of the clay, such as *f* of Fig. 26, which may or may not be of Cretan fabric. On the other hand *g* of the same group, which presents a similar technique in a somewhat variant aspect, is of great interest as a clear example of an imported vessel.

This vase, of which two other more or less complete specimens were found, exhibits as its principal motive three birds, the colouring of which varies from brown to a brilliant red on the light buff ground of the clay surface. Its archaic form—with the mouth drawn back in reminiscence of

its derivation, through the *askos* type, from a primitive skin vessel,—would be alone sufficient to place it outside the Minôan series. It is, in fact, a typical ceramic product of Melos; and identical types of vessel with the same bird designs were found at Phylakopi associated with remains belonging to an advanced period of the Second Settlement.

Fig. 26.—Painted Vessels from Temple Repositories.

The synchronism thus established is of great archaeological importance. These Melian 'bird vases' belong in fact to the same cultural stratum there as the 'Pillar-Houses,' which in other respects present such a marked parallelism with the Pillar Rooms of the Knossian Palace. In

Melos this ceramic type is at home, and the successive stages of its evolution from the skin-shaped prototype can be traced in the early strata of Phylakopi itself, and in the tombs of Pelos.

The course of the obsidian trade had brought Crete already in Neolithic times into intimate relations with Melos, and the occurrence in different strata of Phylakopi of imported pottery belonging to the successive stages of Minôan ceramic art, as well as of their indigenous imitations, shows how great was the Cretan influence on the smaller island.[1] During the special period to which the Palace Repositories belong, this influence is further illustrated by the fresco of the flying fish which, if not actually a Knossian importation, is beyond all doubt a work of the Knossian School.[2] There is moreover the further suggestive circumstance that the Minôan linear characters—in one case even, it would appear, a Minôan personal name,—appear incised on the contemporary Melian pottery.[3] The evidence of the importation of Melian vases at this time into Crete has therefore a peculiar interest as indicating that at a time of ceramic transition, marked by the close of the first period of the Knossian Palace, a counter influence from the Aegean side was making itself felt.

How far, one is tempted to ask, may this Cycladic influence have also had a political side? Were these intrusive Aegean relations in any way contributary to the Palace catastrophe that marked the close of this epoch?

§ 11.—THE TEMPLE REPOSITORIES: THE CLAY DOCUMENTS AND SEAL IMPRESSIONS.

The lower stratum of the Eastern Repository containing the porcelain and other precious objects also yielded a large number of seal impressions and a few inscribed clay documents. These latter, consisting of a small tablet inscribed on both sides, a clay label, and two clay disks with seal impressions round their edges, have an importance as regards the history of the Cretan scripts out of all proportion to their numbers.

The characters, as will be seen from the tablet shown in Fig. 27, are of the linear class, but they differ from the ordinary linear characters as

[1] For a fuller exposition of this ceramic influence I must refer to Dr. Mackenzie's paper in the forthcoming work on the Excavations of the British School at Phylakopi.

[2] See *Report*, &c., 1902, p. 58.

[3] See my note on the Marks on the Melian pottery in the forthcoming publication on Phylakopi referred to above.

they appear on the clay tablets of the succeeding Palace Period. In other words they represent a distinctive form of linear writing that was in use towards the conclusion of the first Period of the Later Palace at Knossos.

The evidence derived from the present deposit would in itself have been too limited to supply a full knowledge of the system of linear script with which we have here to deal. But a comparative study of the materials discovered in other parts of the island happily enables us to make good the deficiency. The form of certain typical characters here found, the system of numeration, the shape of the tablet itself and of the sealed disks, correspond, in fact, with those of the clay archives recently discovered by

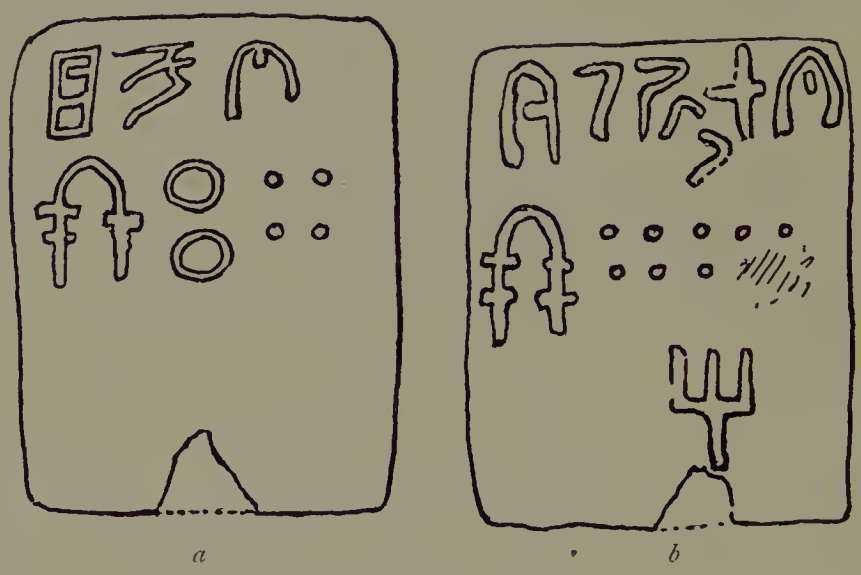


FIG. 27 *a* AND *b*.—INSCRIBED CLAY TABLET [LINEAR SCRIPT CLASS A] FROM TEMPLE REPOSITORY ($\frac{1}{1}$).

the Italian Mission in the small Palace or Royal Villa of Hagia Triada near Phaestos.[1] Other more isolated discoveries further show that this early system of linear script—which may be conveniently termed Class A as opposed to Class B of the latest Palace Period at Knossos—had a wide extension in the island. An inscribed clay tablet found by the British School at Palaikastro [2] belongs to the same class, as also the characters on

[1] Federigo Halbherr, 'Resti etc. scoperti a Haghia Triada. Rapporto sulle ricerche del 1902.' (*Mon. Antichi* xiii.), p. 21 *seqq*. Further discoveries of tablets presenting the same characters were made during 1903, which by the great courtesy of Professor Halbherr I have been allowed to study.

[2] A photograph of this has been kindly supplied me by Mr. Bosanquet, and I have also had the opportunity of studying the original at Candia.

a clay disk found by Miss Boyd at Gournià in 1903. There can be little doubt, moreover, that the signs on the Dictaean Libation Table fit on the same system. At Knossos itself certain graffito inscriptions on pottery and those of another isolated tablet prove to belong to the same category.

The Repository of the Knossian Sanctuary has now supplied what was wanting in these other discoveries, namely, a definite chronological landmark for this form of linear script. At Knossos, at least, it is seen to belong to the close of the first Period of the Later Palace, and to have been displaced in the succeeding Minôan age by the system represented in the great mass of the Palace Archives, which may be briefly referred to as Class B.

What, then, is the relation of Class A to Class B? It must in any case be recognised that there is a large common element. Considering the later appearance of Class B in the Palace it might be thought that it stood in a more or less filial relation to the other, representing a somewhat more developed stage, though it is to be observed that a certain number of signs are peculiar to one or the other group. In some respects Class A shows a somewhat nearer relation to the earlier pictographic series of the Middle Minôan Period, as, for instance, in the occurrence of a perforated clay label, and in one feature of the numeral system—the indication of 10 by a dot. On the other hand we are confronted by the curious phenomenon that some of the forms of linear characters belonging to Class A are further advanced from their pictorial original than the corresponding linear signs of Class B—the flying bird-sign affords a good instance of this.

We are thus reduced to the conclusion that Class B, though of later appearance in the Palace, is fundamentally a parallel rather than a derivative system. It seems to be an alternative form of linear script, of more or less equal antiquity, which, owing to some political change, came to the fore during the latest Palace period at the expense of the other. At Hagia Triada there is no evidence of any such supersession of Class A. It is possible, therefore, that it continued to be in vogue there to a later date than at Knossos, though it must at the same time be remarked that the clay seal impressions with which the Hagia Triada tablets were associated very closely conform in style and character to the seal impressions from the Temple Repository at Knossos with which we are at present concerned. This is a strong indication that they too, as a whole, belong

to a period corresponding with the latter part of the first Period of the Later Palace at Knossos.

The change in the official style as seen in the archives of the Latest Palace Period at Knossos is a phenomenon which seems best to explain itself on the hypothesis of a dynastic revolution. That there was no change of race appears from various indications. The two systems of script, though divergent, show a large common element, and the resemblances are such as to permit a comparison of sign-groups belonging to the two systems. It thus appears that the language was essentially the same and in one case at least what appears to be a personal name is common to the two scripts.[1] There is no ethnic break, and the culture exhibited by the remains of the latest period of the Palace on the whole represents the natural outgrowth of the penultimate period of its history to which the contents of the Temple Repositories belong.

The clear evidence of the relatively early date of the deposit gives a special value to the considerable series of clay seal impressions found with the tablets. These clay sealings, of which over 160 were discovered, had evidently been attached by strings or threads that ran through them, and of which traces remained, to documents on perishable materials,—perhaps parchment, or even papyrus,—relating to the Sanctuary. Many of them bore subjects of direct or indirect religious import.

The impressions show fifty different designs, besides about a dozen in too imperfect a condition to be made out with certainty. The following list will give a general idea of the subjects :—

1–6.—Decorative designs with spiral and curvilinear patterns. Five varieties.
7.—Tripartite design with pallium-like centre (see Fig. 28).
8–12.—Semi-decorative designs which seem in part to represent façades and doors of buildings. A characteristic Minôan class. Four varieties.
13.—Quadruple pattern, apparently based on a group of four cockle-shells.
14.—Compound subject of enigmatic meaning (see Fig. 29). (For the cap-like object, cf. Zakro sealings).
15.—Uncertain subject with crescents on stands (Fig. 30).
16, 17.—Design apparently representing a canopy with four forked supports. Two varieties.
18, 19.—Flowers of aster type. Two varieties.

[1] In a paper read to the British Academy on Nov. 25, 1903, on 'the Pictographic and Linear Scripts of Crete and their Relations' I have already called attention to the value of the evidence supplied by the inscriptions from the Temple Repository at Knossos, and to their identity in style with those of Hagia Triada (see Summary Report, *Times*, Nov. 26).

20.—Tulip-like flower.
21.—Uncertain plant with curving foliage.
22.—Three tree stems apparently growing out of rocks (Fig. 31).
23.—Lion seizing prey.
24.—Convoluted design consisting of six heads of horned sheep joined by the long curving horns.
25.—Horned sheep standing: in the field Swastika symbol.
26.—Horned sheep as preceding, with trough. In field above, a Swastika (see below, Fig. 59).

FIG. 28.—CLAY SEAL IMPRESSION ($\frac{2}{1}$).

FIG. 29.—CLAY SEAL IMPRESSION ($\frac{2}{1}$).

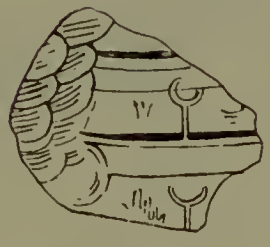


FIG. 30.—CLAY SEAL IMPRESSION ($\frac{2}{1}$).

FIG. 31.—CLAY SEAL IMPRESSION: TREE TRUNKS ($\frac{2}{1}$).

27.—Bovine animal seated on base, with head turned back and seen from behind.
28.—Cow suckling calf.
29.—She-goat and kid.
30.—Goat standing, looking back.
31-33.—Wild goat running. Three varieties.
34.—Goat seated looking back: apparently a cruciform symbol below.
35.—Three wolves' (or dogs') heads (see Fig. 32).
36.—Duck standing.
37.—Dove flying.
38.—Four owls grouped round stellar symbol with twelve rays (see Fig. 33).
39.—Two scorpions.

40.—Crab.
41.—Dolphin.
42.—Group of three fish.
43.—Two Triton shells (see Fig. 34).
44.—Columnar device.
45.—Cross (see below, Fig. 61).
46.—Armed Goddess and lion (see below, Fig. 37).
47.—Armed God and lioness (see below, Fig. 38).
48.—Scene of the *taurokathapsia*.
49.—Man in boat, repelling attack of sea-monster (see below, Fig. 36).
50.—Pugilist before column (Fig. 35).

Fig. 32.—Clay Seal Impression : Wolves' or Dogs' Heads (2/1).

Fig. 33.—Clay Seal Impression : Four Owls Round Star (3/1).

Fig. 34.—Clay Seal Impression : Two Triton Shells (3/1).

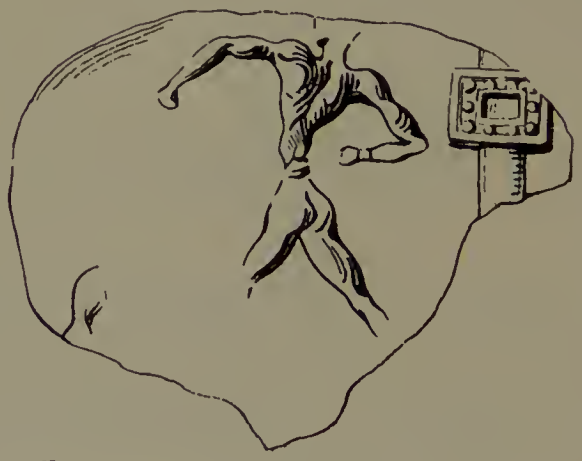


Fig. 35.—Clay Seal Impression : Pugilist (3/1).

After what has been said as to the high degree of naturalistic perfection attained already by the Cretan engravers at the close of the preceding Middle Minôan Period,[1] the beauty and freedom of many of the seal-types of the present deposit cannot excite surprise. Such designs

[1] See above, p. 2.

as the wolves' or dogs' heads (Fig. 32), the small owls (Fig. 33), and the Triton shells (Fig. 34) show a great fidelity to nature, in spite of the necessarily imperfect character of the clay impressions.

Among the animated scenes represented, one of the most interesting is the episode of the bull ring (No. 48) which curiously recalls the wall-painting of the female toreadors.[1] A youth is here seen turning a back somersault over the neck of a bull behind which stands another figure with one arm raised. The close parallelism between the two designs shows in how near a relation the Minôan gem-engraver's art stood to that of the painter. That the same close affinity existed between the glyptic art and that of the sculptor of small reliefs as seen on the steatite vases is brought out in a conspicuous manner by the pugilistic scene presented by No. 50. This impression (Fig. 35), though unfortunately the whole of the design has not been preserved, shows a highly athletic figure of a boxer standing before a column, with a curious rectangular impost of a kind reproduced in a building exhibited by one of the miniature wall-paintings, and again on a small steatite relief to be described below. The attitude of the pugilist himself is practically identical with that seen on the small steatite relief found in the North-East Palace region.[2] This comparison is now completed by the appearance on the lower zone of the magnificent steatite *rhyton* discovered by the Italian Mission at Hagia Triada, of two helmeted 'gladiators' both advancing to the left with a similar column between them.[3] As in the scheme before us and the other Knossian design, they hold out the left arm for defence while the right is drawn back as if about to deal a blow. These pugilists wore a kind of boxing-glove and *cestus*, and a trace of this may be detected on the right wrist of the figure in the present seal impression.

Of striking novelty is another exciting scene (Fig. 36) in which a man, standing in a light skiff, endeavours to repel the attack of a sea-monster. It is not clear whether the boatman uses a weapon or an oar in his defence. The sea-monster's head raised from the waves is of that dog-like aspect associated from Homeric times onwards with Scylla. The

[1] Compare, too, the seal impression found in 1902. *Report*, &c., 1902, p. 78, Fig. 43.

[2] *Report*, &c., 1901, p. 95, Fig. 31. A seal impression with a fuller design of the same kind was found at Hagia Triada.

[3] R. Paribeni, 'Lavori eseguiti dalla Missione Italiana nel Palazzo e nella necropoli di Haghia Triada, 1903.' (*Rendiconti della R. Accademia dei Lincei*, vol. xii. fasc. 70, p. 17). The remains of an upper zone of this *rhyton* exhibit a hunting scene of wild bulls closely resembling that of the Vapheio Cup.

monster here, it is true, has only one head, but the canine jaws, the water boiling amid the rocks :

λέβης ὡς ἐν πυρὶ πολλῷ
Πᾶσ' ἀνεμορμύρεσκε κυκωμένη—

the onslaught on the vessel—the whole scene may be taken as an early illustration of a fabled sea-monster, perhaps already localised in the Sicilian Straits—of which the Odyssey retained a living tradition. The forepart of the monster, in fact, singularly recalls the *pistrix* which Gelôn placed on the coinage of Syracuse as the symbol of his sea victory over the Etruscans that gave him the mastery of the Straits.[1]

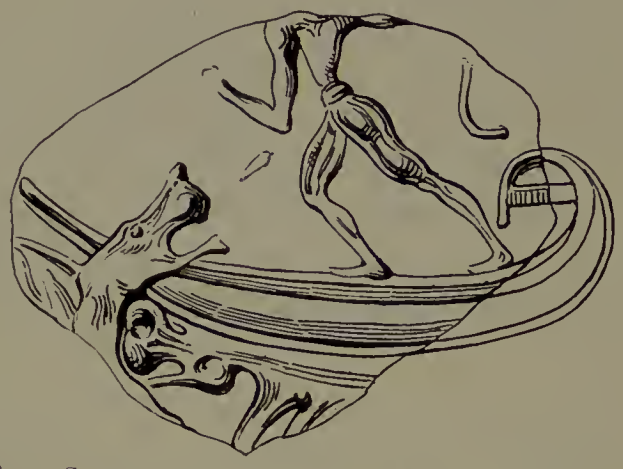


Fig. 36.—Clay Seal Impression : Boatman and Sea-Monster (3/1).

It is clear that many of the above seal-types had a religious significance. The accumulated evidences of the intimate association of the bull with Minôan Cult[2] suggest the conclusion that the performances of the bull-ring, such as that illustrated by No. 47, were themselves connected with sacred ceremonies. Of the ritual usage of the Triton shell (No. 42) something has been already said.[3] The trinity of trees (No. 22) and the flying dove (No. 37) are recognised objects of the cult. The repetition of the groups of the cow and calf and wild goat and

[1] See Head, *Coinage of Syracuse*, p. 10, and cf. Holm, *Geschichte Siciliens*, I. p. 572 and my 'Contributions to Sicilian Numismatics' *Num. Chron.* 1894, p. 212. The artistic tradition of similar sea-monsters goes back to the very beginnings of a later classical art : witness an amygdaloid gem of the 'Melian' class in my own collection found at Epidauros Limera and exhibiting a 'pistrix' beneath the forepart of a war galley. This gem dates from about 700 B.C.

[2] For a fresh illustration, see p. 114 below, Fig. 70.

[3] See above, pp. 36, 37.

young on the faïence reliefs of the shrine, bringing these subjects into natural connexion with the worship of a Mother Goddess,[1] sufficiently explains the occurrence of similar designs on the seal impressions, Nos. 28 and 29. The large horned sheep of Nos. 25 and 26 acquires, as will be shown below,[2] a definite religious character from the Swastika symbol inserted in the field above it. On the other hand the cross which stands as the sole type on No. 45 [3] (see Fig. 61, p. 90 below) connects itself with what may well be regarded as the most important ritual object found in the Repository. On the importance of these cruciform symbols in connexion with the Palace cult more will be said below.

FIG. 37.—CLAY SEAL IMPRESSION: WARRIOR GODDESS AND LION ($\frac{3}{1}$).

FIG. 38.—CLAY SEAL IMPRESSION: ARMED GOD AND LIONESS (?) ($\frac{3}{1}$).

The warrior God and Goddess with their lion guardians, exhibited by Nos. 46 and 47, bring the present series into direct relation with the sealings depicting a warrior Goddess on her lion-guarded peak found in the recess immediately East of the Repositories in 1901.[4] The seal from which the present design of the female divinity was taken [5] was in this case smaller and has been simplified by the omission of the rocky peak, the pillar temple, and the votary. But it clearly represents the same

[1] See below, p. 86.

[2] See p. 88.

[3] The cross type appears five times on the side of clay disks; one with inscribed characters on its face. On the same disk appears impressions of a couched bovine animal on a base (No. 27) and a façade with masonry (No. 8).

[4] See *Report*, &c., 1901, p. 29, Fig. 9.

[5] There were eleven examples of this type in the Repository.

Goddess, and alike the subject, the style of the engraving, and the contiguous place of discovery show that both sealings belong to the same Sanctuary and to the same period of its history. The Goddess here (Fig. 37) wears a peaked cap and somewhat short skirt, she is holding a spear, and the lion looks back and up at her. On some seal impressions from Hagia Triada is seen apparently the same Goddess, wearing a similar peaked cap, between two attendants, each of whom holds aloft a double axe.[1] The God (Fig. 38)[2] wears a short tunic and a somewhat peaked head-piece which recalls those of some contemporary statuettes of bronze, such as that from the votive cave or rock-shelter of Patso near Sybrita[3] in Crete, the prominent front of which, however, is curiously 'Hittite.' He holds a spear and a shield of exceptional form. The animal at his side is apparently a lioness.[4] These figures of lion-guarded divinities, well represented in the sealings of this deposit, must be identified with the same divine pair of whose cult in the Minôan Palace of Knossos so many records have already come to light.

§ 12.—Temple Repositories: The Ivory and Bone Objects.

Of inlays in ivory or bone not many have been preserved. The most elaborate were in the shape alternately of flowers and buds, apparently suggested by those of a pomegranate. The under-sides of these pieces showed incised marks in the shape of a broad H, accompanied by a varying number of dots. A fragment of another piece for inlaying presented an incised T. An ivory inlay was also found of a crescent-shaped outline similar to others of faïence and crystal that have occurred elsewhere in the Palace.

The most elegant ivory object, obtained, like the other, from the Eastern Repository, was the delicately carved handle plate of some instrument, showing rivet-holes for fixing the blade, which ran at right angles to the end of the handle (Fig. 39).[5]

[1] In Halbherr, *Resti* etc. *Rapporto*, 1902, p. 39, Fig. 33. This type is there reproduced from an imperfect example, the double axes, clear on some impressions of the seal since discovered, not appearing.

[2] This type was represented by eight examples.

[3] *Myc. Tree and Pillar Cult*, p. 27, Fig. 15.

[4] This pard-like creature may however be intended for some kind of mastiff.

[5] Length 6·78 centimetres. There had originally been a second handle plate of the same form the blade being held between them. The upper and lower faces of the plate and the side view are shown in Fig. 39.

Two bone relics are of considerable interest. They represent the notched end and plume of an arrow, the incised decoration of the shaft

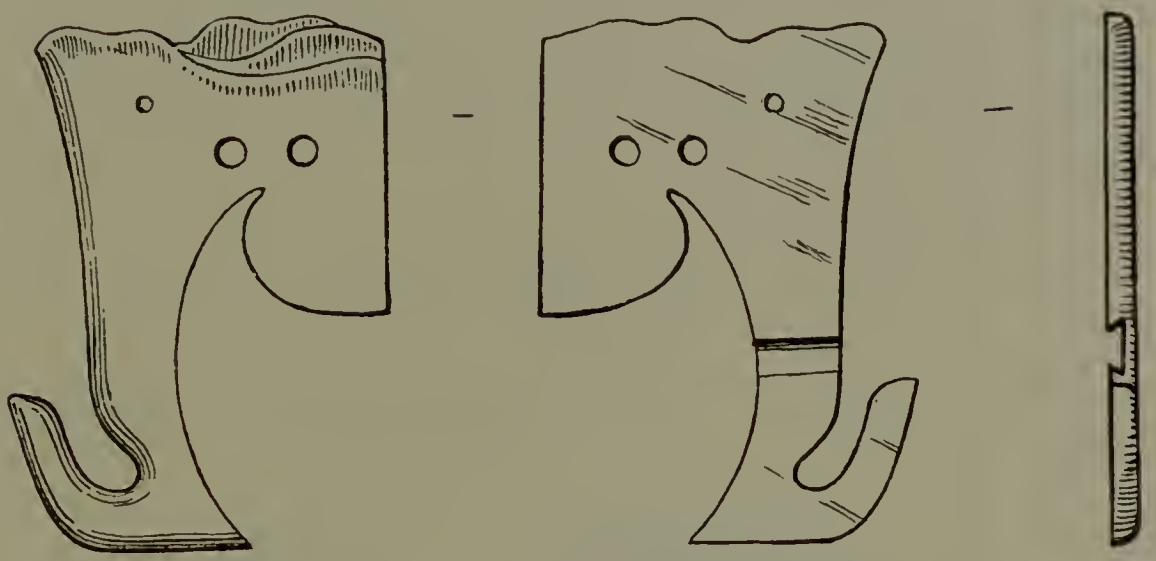


FIG. 39.—PLATE OF IVORY HANDLE OF INSTRUMENT ($\frac{2}{3}$).

showing a red inlay (Fig. 40). Both specimens are smooth below, with rivet-holes, which point to the former existence of a middle plate of metal. The

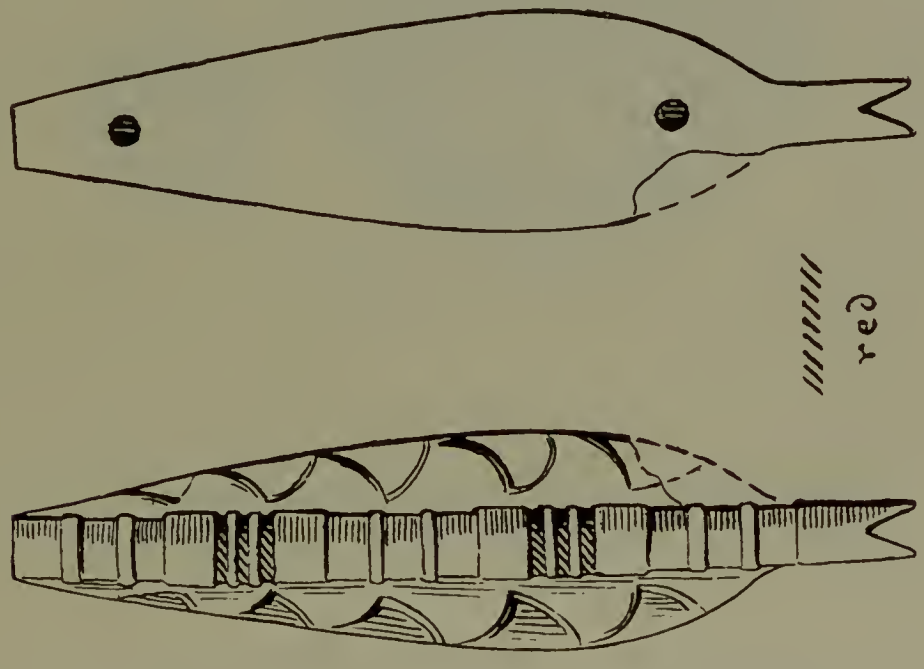


FIG. 40.—ARROW PLUME OF BONE, WITH RED INLAY ($\frac{1}{1}$).

lower ends of these objects are sawn off, and had been probably applied to a metal shaft, fixed on to or forming one piece with the metal plate between

the two bone pieces. Such an arrow could have served no practical use, and the relic may therefore be regarded as of a votive nature. We recall the Mother Goddess as she appears on a Cretan lentoid,[1] drawing a bow as she runs; nor should it be forgotten that in later days the Cretan Dictynna, who combines the attributes of Rhea and Artemis, sits throned among the Curetes, holding the infant Zeus on her left hand, and an arrow in her right.[2]

§ 13.—The Temple Repositories: Decorative Objects of Faïence.

The most characteristic element among the contents of this Temple Treasury—except for a few scattered pieces found in the other cist, confined to the Eastern Repository—are the abundant series of objects made of a kind of faïence or native 'porcelain.'[3] An isolated vase of this material, and numerous plaques for inlaying—among them those reproducing the small houses—had already occurred at various points of the excavation.[4] But there was nothing to prepare us for the extraordinary variety, the beauty and the technical perfection of the relics here brought to light. They constitute a new revelation of Minôan art at the highest point of its development. We seem here to have a considerable part of the decorative fittings of a small shrine, to the adornment of which the services of the most skilful craftsmen were devoted.

The fabric at Knossos of an indigenous class of faïence was not new indeed at this period. The contents of a deposit to be described below[5] tend to show that not only beads of the same material, but possibly also plaques for inlaying, were produced by the close of the Early Minôan period. The prevailing pale bluish tint of these, faintly tinged with green, corresponds with the characteristic faïence hue of the Early Egyptian Dynasties, and the beads, with their large perforations, suggest comparisons with those of the Sixth Dynasty. In the case of the faïence relics from the Temple Repository the paler tones are supplemented by deeper tints. The beads here, of

[1] Berlin Cat. No. 2; Furtwängler, *Antike Gemmen*, Taf. II. 24.

[2] On coins of Crete *in genere* struck under Trajan, B. M. Cat. Pl. I. 9. In a specimen in my own collection the arrow is very clear.

[3] As shown below, it can only be called 'porcelain' in a loose popular sense.

[4] So too in the excavations of the Italian Mission at Phaestos and Hagia Triada.

[5] See § 16.

which whole heaps were found, vary in colour from white to a bright greenish blue. Their types are seen in Fig. 41; but by far the most abundant of these is the globular form. This fact is interesting, since this globular type of bead is very typical of the Twelfth and Thirteenth Dynasties, where, too, a much brighter blue-green hue is affected than was usual in the days of the Early Empire. Except for the fact that the perforation of the Knossian beads is as a rule smaller than that of the Egyptian examples, they are almost indistinguishable from them. The bugles and the more oval type shown in Fig. 41 also find their counterparts in these Middle Empire Egyptian forms.

That this Minôan fabric of enamelled ware was introduced from Egypt there can be no manner of doubt. Its glaze, as will be seen,

FIG. 41.—FAIENCE BEADS FROM TEMPLE REPOSITORY (SLIGHTLY REDUCED).

resembles that of the so-called 'Egyptian porcelain.' It is to be observed in this connexion that on many plaques for inlaying there appear impressed or relieved signs on the lower side, presenting a close parallelism with those of Egyptian plaques[1] of the same material. These signs in turn correspond with others belonging to still more numerous

[1] In this particular deposit the signs on the under-side of some of the inlays were little more than groups of notches. On the roundels from the Throne Room and faïence plaques for inlaying found elsewhere regular signs occurred analogous to those of the bone and ivory inlays from the Palace. See *Report*, &c., 1901, pp. 119, 120, where the marks on the faïence inlays from Tell-el-Yehûdiyeh, &c., are compared. Similar signs occur on the faïence plaques found by the Italians at Phaestos and Hagia Triada.

series[1] used by the Cretan inlayers in bone and ivory, which seem to have been, in part at least, literally taken over from the current stock of similar signs in use among Egyptian intarsia workers and jewellers from the earlier Dynastic Period onwards.

The vitreous glaze with which this Minôan faïence is enamelled appears to be of the same largely siliceous composition as is that of the 'Egyptian porcelain.'[2] The prevailing ground colour of this vitreous facing is usually a pale greenish or bluish-white, sometimes giving place to a pure white, sometimes taking a yellow or a lilac tinge. Occasionally the tone is deeper, such as an emerald-green, or more rarely a turquoise blue. The designs on this field are laid on in a purplish-brown or brown deepening into black—more rarely in a pure lilac colour. Exceptionally, the ground colour itself is brown.

The 'body' of this ware consists of a light porous paste of a white or yellowish-white hue mostly formed of a quartzite sand.[3] It would even appear that some curious and not easily explained objects found in the same deposit with the finished faïence articles may possibly represent the form in which the raw material of their interior paste was conveyed to the place of fabric. These objects are thick, more or less cylindrical cakes, with a shallow, cupped depression above.[4] Of the local manufacture of the faïence fabrics, a curious indication is moreover supplied by a steatite mould discovered in the North-West dépendance of the Palace. The

[1] The notches, strokes, or dots of varying numbers which either accompany these signs or appear in place of them evidently refer to the arrangement of the inlays. Here again Egyptian analogy is conclusive—witness the slanting lines, from one to nine in number, incised on the lower surface of the gold and turquoise hawks from bracelets found in the tomb of King Zer at Abydos—to mark their order in the series (Petrie, *Royal Tombs of the Earliest Dynasties*, II. 15).

[2] Professor A. H. Church has kindly examined some specimens of this Palace faïence. He writes 'besides silica the glaze contained lime, a little magnesia, some soda, and a larger amount of potash. The friable and rather porous 'body' or paste of this glazed material contains (in the state in which it was analysed),—(*a*) moisture and other matters—1·22 p.c.; (*b*) matters soluble in strong hydrochloric acid—2·22 p.c.; (*c*) quartzite sand with traces of mica, felspar, and clay—96·56 p.c. (=100). (*b*) consists chiefly of lime and the oxides of iron, alumina, and copper. (*c*) consists of 97·01 p.c. of silica, 1·33 p.c. of alumina, and 0·17 p.c. of lime, with traces of lime, magnesia, copper, and alkalies. The paste when dry has received a coating of glaze, and has been fixed at a moderate heat, just sufficient to fuse the latter without softening the body.' Professor Church considers that the glaze owes its colouring mainly to copper and that it is probably nearly related to 'Egyptian Blue.' The dark browns and black however are referred by him to a ferruginous origin.

[3] In the case of other plaques such as those of the latest Palace Period found in the Throne Room it is of a brown colour.

[4] Some of these were shown in Fig. 20 above, below the Libation Tables.

four sides of this exhibit deeply incised matrices for casting small decorative objects of the same kind as those of the present deposit. The calibre and high relief of some of these show that they could not have been—as were apparently the stone matrices found at Mycenae—used for embossed metal work or for the comparatively small objects in glass paste which characterise the mature Mycenaean industry.[1] There can be no reasonable doubt that they were made to mould the paste for inlays and reliefs in the native faïence.

The mould in question shows on one side (see Fig. 42) a group of small objects including a trochus shell,[2] sections of jointed trumpet shells which

FIG. 42.—MOULD FOR FAÏENCE OBJECTS FROM NORTH-WEST BUILDING, WITH PLASTER CAST [ABOUT ½].

rather recall specimens from the oolite or cretaceous beds[3] than any recent species, a part of a spiral bracelet, a semilunar plaque resembling a faïence

[1] The lowermost matrix on the mould figured by Schliemann (*Mycenae*, p. 107, No. 162) seems to have been made for a glass paste object of a kind representing a degeneration of the console shown below, Fig. 43.

[2] Similar shells in glass paste have been found in tombs of the Lower Town at Mycenae.

[3] E.g. *Ptychoceras gaultinus*, a cretaceous species.

inlay from one of the Kaselles and an ivory example from the Repository with which we are dealing; and a rosette of a type of which more than one faïence reproduction has been found within the Palace. The other sides of the mould exhibit respectively matrices of two very graceful consoles[1] (see Fig. 43) forming part of a cornice that ran perhaps along the upper border of an inlaid chest, and a clenched human hand, about half the natural size, with the little finger sticking out—possibly an amulet. The cornices when completed by the piecing together of sections such as those seen in the

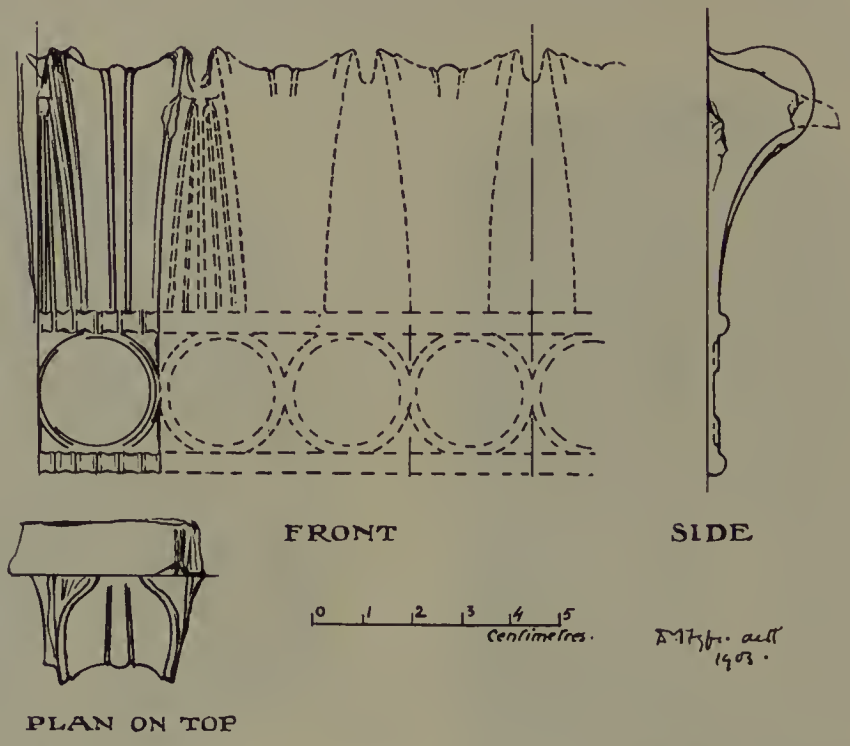


FIG. 43.—DEVELOPMENT OF FRIEZE BASED ON CONSOLE FROM MOULD (ABOUT ½ SCALE).

mould supply a new and extremely elegant architectonic feature which was no doubt carried out on a larger scale in Minôan buildings.

A piece of a Sacral Knot and a plaque for inlaying of similar faïence ware were found in the Fourth Shaft Grave at Mycenae,[2] vases, from Grave II., and a fragment with a head of a warrior from Grave III. But, while these and a few other isolated examples supply the only record of this fabric on mainland sites, we see from the abundance and variety of the faïence

[1] A plain example of such a console in native faïence was found in the Palace (near the Southern Terrace). Degenerations of similar consoles in glass paste are not infrequent in 'Late' Mycenaean deposits. For the matrix of one such found at Mycenae, see above, p. 61, note 1.

[2] Schliemann, *Mycenae*, I. 241, Nos. 350, 351.

objects found at Knossos that the art was here at home.[1] It hardly needs the discovery of the actual moulds and apparently of the raw materials of manufacture on this site to show that a faïence manufactory existed in immediate connexion with the Palace itself, and its Central Sanctuary. The Minôan Priest-Kings thus anticipated an usage followed by many modern European rulers of establishing fabrics of faïence, porcelain, or majolica, in direct connexion with their palaces and castles. The faïence manufactory in the Palace of Knossos is in this respect the remote predecessor of that of Vincennes and Sèvres, of Medicean Florence, of Urbino or Capodimonte, of Meissen, and of many other royal and princely fabrics of a similar kind.

The dampness of the Cretan climate as compared with that of Egypt no doubt accounts for the decay of the vitreous surface of these objects in many cases, and the inner paste where unprotected has a tendency to crumble

FIG. 44.—FAÏENCE PENDANT.

away. A certain amount of the faïence deposit was therefore found in a much perished condition and there had been a good deal of breakage of the larger objects, due probably to violent disturbance by the original treasure hunters. Happily, however, in many cases, it was possible to reconstitute these, while other relics, especially some of the marine subjects, were brilliantly preserved.

Of the minor objects such as the mosaic plaques and parts of borders of inlays, it is impossible here to speak in detail. Some decorative pieces took the form of lotus flowers and buds (Fig. 45) an interesting record of the Egyptian sources of the art. The same influence is

[1] In the 'Late' Mycenaean Period, answering to the 'Period of Partial Occupation' of the Palace at Knossos, Cyprus, as the excavations at Enkomi show, had become a great centre of faïence fabric.

perceptible in the very elegant pendant, perhaps of a necklace, shown in Fig. 44.

Some of the flowers, however, modelled in relief, reproduce rather the native crocus or saffron, so dear to Minôan art. Still more remarkable is the naturalistic stem of a tree or plant, the surface coloured brown executed in relief, and leaves and flowers, apparently belonging to it, in the

Fig. 45.—Flowers, Foliage, and Fruit in Faïence (c. ⅔).

round, both repeating the same tints, a pale blue or bluish-green ground colour with purplish veins[1] (see Fig. 45). The fruit with a groove in its side, coloured above a pale brown, also shown in Fig. 45, appears to be a plum.

The marine subjects reproduced are also strikingly naturalistic. They were found scattered, but the analogies offered by parallel scenes suggest

[1] The calix of the flower as seen in profile is bell-shaped, patulous at the upper margin : height 4 centimetres.

Fig. 46.—Marine Subjects in Faïence.

some such a grouping as that shown in Fig. 46. Materials for comparison are supplied by such sea-pieces as that of the Melian painting representing the flying fish, the great design of fish, rocks, and spray from the Queen's Megaron, and the fish and polyp in a rocky pool seen on a gem impression. The rocks, according to these examples and the subjects of certain vase paintings, would naturally have formed part of the setting; they show a brown ground, a surface with shallow, cupped hollows, and a fantastic outline suggestive of Japanese art. The cockle-shells, very faithfully reproduced, are of white or bluish-white tint with brown bands.[1] Still more beautiful are the nautiluses, the smaller of which are very perfectly preserved, with a brilliantly glazed surface of a silvery lilac tint. The larger nautiluses

Fig. 47.—Flying Fish in Faïence (slightly reduced).

are white or pale bluish-green, with brown bands.[2] The central objects of the group, which was originally doubtless much more extensive, are here

[1] Over a dozen of these were found. Their lower surface is flat.

[2] The nautiluses were of four sizes, 9 centimetres × 4·3, 6·6 × 3·5, and 4 × 2·5, and one intermediate between the two last. They were all modelled in the round.

taken to be the flying fish. Of these, sufficient remains were found to restore two specimens: the foremost of the two, as is shown in Fig. 47, has the body and most of the upper fin preserved. Of the second example only the tail and part of a 'wing' were forthcoming, but as it was from the same mould as the other it could be completed with certainty. The ground colour of these is buff with brown markings. The fish, which are flat below, were probably set in coloured plaster imitating the sea waves. We have here, in fact, an interesting parallel to the wall-painting found in the Pillar House of Phylakopi of the flying fish darting amidst the sea spray. The 'swallow-fish' (*χελιδονόψαρι*), as it is known to the modern Greeks, is also a favourite subject of Minôan gems.

Exquisite as are these various productions of the Palace fabric of faïence it will probably be admitted that, as regards the ideal presentment of natural forms, the art reaches its highest levels in certain small reliefs exhibiting groups of cows and goats suckling their young. These scenes are in each case repeated by a series of examples taken from a single mould, and their recurrence, as well as the parallelism of the two subjects, makes it natural to detect in them a direct reference to the cult of the Mother Goddess of Minôan Crete.

Of these, the group of the cow and calf, in fact, presents essentially the same type as the Cow and Calf of Hathor and Isis. This was afterwards a favourite subject of Phoenician art, while in Classical Greece, as on the coins of Karystos, we see it attached to the service of Hera.[1] The animals are here exhibited as standing on a low base, divided into rectangular compartments alternately light and dark, which gives the whole an architectonic aspect. The ground colour of both cow and calf is a pale buff on which are sepia spots, and a curious feature of the plaques, repeated in the parallel type showing the wild goats, is that their upper margin follows the line of the animals' bodies. It seems probable, therefore, that they were applied to a backing of coloured plaster. What appear to have been the horns were in both cases executed in separate pieces in the round. The cow, which is of somewhat elongated proportions, turns back her head to lick the calf's hindquarters. The suckling calf is itself delineated in a manner which reveals an extraordinary observation of nature. In beauty of modelling and in living

[1] It is also common on Minôan gems, and it is possible (as seems certainly the case on some of the bovine designs of the Eretrian dies) that these Karystian coin-types actually represent a revival of designs taken from 'Mycenaean' gem engravings.

interest, Egyptian, Phoenician, and, it must be added, Classical Greek renderings of this traditional group are far surpassed by the Minôan artist.[1]

The other class of animal reliefs exhibits a goat and young. The surface colour of the faïence is here a pale green with the same dark sepia markings. Although no perfect example of any single plaque was preserved, the fact that there were remains of several from the same mould has made it possible to complete practically the whole relief with absolute

Fig. 48.—Faïence Vase, Restored (⅔).

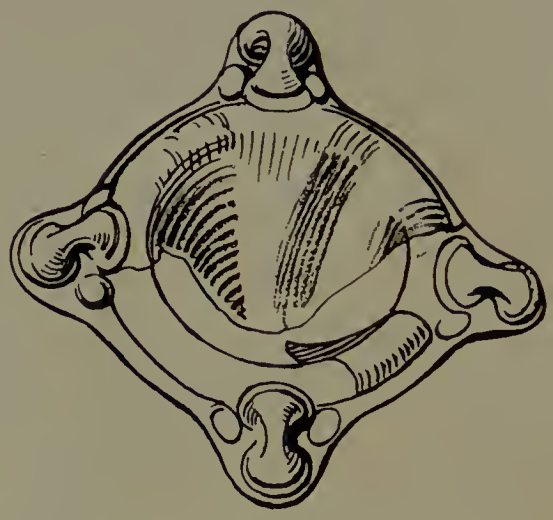


Fig. 49.—White and Brown Faïence Bowl, with Shields (⅔).

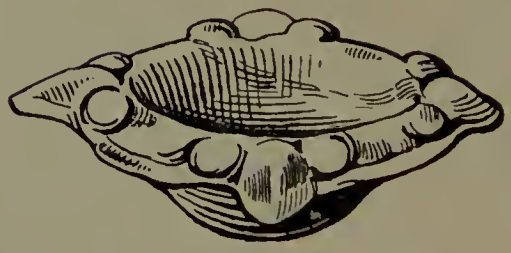


Fig. 50.—Faïence Bowl: White Marbled with Brown (⅔).

certainty. A careful drawing of the result by Mr. Halvor Bagge is reproduced in Pl. III.

The architectural base of the other series is here replaced by what, in view of other analogies, must be taken to be conventional representations

[1] The length of this plaque is 20·5 centimetres, the height 12·4. Besides this type, of which there were fragments belonging to several examples, there occurred parts of reliefs belonging to another similar series, the plaques of which were about ⅔rds of the dimensions of the other. A calf belonging to this smaller series is fairly preserved.

of rocks. The scene is laid on a mountain crag of Dicta or of Ida, and the animal here is the Cretan wild goat or *Agrimi*. The suckling kid is shown in almost identically the same posture as the calf in the parallel design. In front, another kid looks up at its mother and bleats to her its desire, while the mother goat in an attitude of serene impartiality seems to chide the impatience of her offspring. This design, apart from its beauty and naturalism, is characterised by a certain ideal dignity and balance.

Among the faïence vessels, that shown in Fig. 48 as restored from its fragmentary remains recalls in its shape and spiraliform decoration the gold vase found in the Fourth Shaft Grave at Mycenae.

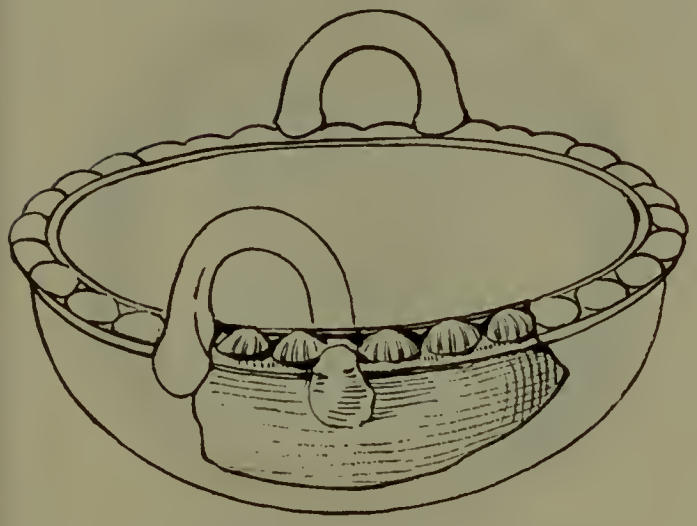


FIG. 51.—TWO-HANDLED BOWL OF FAÏENCE WITH COCKLE SHELL RELIEFS, RESTORED (⅔).

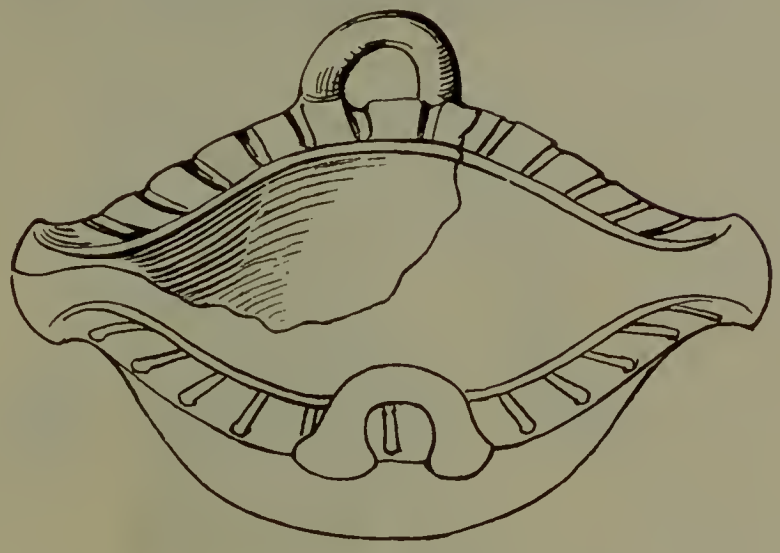


FIG. 52.—TWO-HANDLED BOWL OF FAÏENCE WITH TWO LIPS (RESTORED).

There were also several small vessels with decorated rims which had the appearance of miniature bowls, and perhaps possessed a specially votive character. One of these (Fig. 49) of a whitish colour with brown bands bears on its upper margin four of the 8-shaped shields otherwise associated with Minôan cult.[1] The somewhat analogous vessel, white marbled with brown, seen in profile in Fig. 50, also shows on its upper rim certain somewhat shield-like bosses. Unfortunately only part was recovered of the beautiful little bowl completed in Fig. 51, the upper margin of which is decorated with cockle-shells in relief. Another elegant two-handled bowl was apparently double-lipped (Fig. 52).

[1] See *Myc. Tree and Pillar Cult*, pp. 78, 79, 81, and especially p. 82 (where the *Ancilia* are compared).

Two very elegant, handled cups remain to be described. They are both of the same shape, and the pale green surface of their sides is in both cases relieved by fern-like sprays of a deep brown colour. But the vase shown in Fig. 53 *a* and *b* presents a further decoration of singular beauty and originality. In this case there springs from the top of the handle another spray in relief—apparently of rose leaves—which spreads over part of the

Fig. 53 *a*.—Faïence Cup showing Fernlike Sprays on Exterior (⅔).

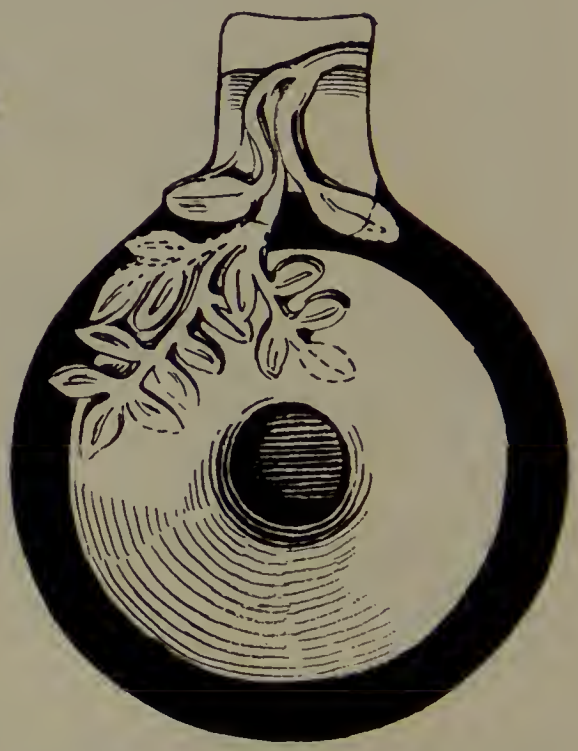


Fig. 53 *b*.—Faïence Cup from above, showing Rose Leaves in Relief (⅔).

inner margin of the cup. It may be suspected from their shape and the subjects of the designs that these vessels were used to hold flowers for altar decoration.

The most remarkable of all the faïence objects discovered in the Repository, the images of a Goddess and her votaries, are reserved for the succeeding Section.

§ 14.—The Snake Goddess, Votaries and Votive Robes.

The remaining faïence relics of the Temple Repositories bear a still more directly religious character. Of these the most remarkable are

FIG. 54 *a* AND *b*.—FAÏENCE FIGURE OF SNAKE GODDESS (ABOUT ½ SCALE).

Fig. 55.—Faïence Figure of Snake Goddess: Back View (about ½ scale).

figures of a Snake Goddess and an attendant or Votary, with part of another.

The figure of the Goddess, as reconstituted, is 34·2 centimetres (13½ inches) in height (Figs. 54 and 55). She wears a high tiara of a purplish-brown colour with a white border, a necklace, and a dress to be more fully described below, consisting of a richly embroidered jacket with a laced bodice, and a skirt with a kind of short double apron. Her hair, seen in a fringe above her forehead, falls behind her neck and on to her shoulders; her eyes are black, as also her eyebrows, which are given in relief, and her ears are of abnormal size, possibly with a religious intention. Her breasts, which are almost entirely bare, are of matronly proportions. The ground colour of the whole, including the flesh tint, is generally a milky white, the various details being laid on in purple, purplish-brown, or black.

About the Goddess are coiled three snakes with greenish bodies spotted with purple-brown. The head of one of these she holds out in her right hand, its body follows the arm upwards, then descends behind the shoulders, and ascends again to the left arm, which held the tail.[1]

[1] The l. fore-arm with the tail is restored in the figure.

FIG. 56 *a* AND *b*.—FAIENCE FIGURE OF FEMALE VOTARY (SCALE $\frac{2}{3}$).

Round the hips of the Goddess, below the waist, two other snakes are interlaced. One of these, whose head appears in the centre of this serpentine girdle, is continued in a festoon down the front of the apron, and thence ascending along the edge of the jacket to the neck, coils its tail round the Goddess's right ear. Finally, a third snake, whose tail-end forms part of the plaitwork about the hips, runs up along the left fringe of the jacket over the left ear and coils up round the tiara, from the summit of which its head (restored in the figure[1]) originally projected.

Parts of the apron with the lower curve of the snakes that ran over them, and the greater part of the skirt, were wanting. Happily, however, a skirt of similar pattern belonging to another figure was more fully preserved, and has rendered possible its complete restoration.

The second figure, which is rather that of an attendant or Votary, (Figs. 56 *a*, *b* and 57) had unfortunately lost its head, and it is doubtful whether it was surmounted by a tiara like the Goddess. It is somewhat smaller than the other, the height to the neck being 20 centimetres. Here we see the same short jacket with a raised cord-like border and a laced bodice, a girdle, (perhaps of metal) in place of the coiling snakes that surround the Goddess's hips, a double 'apron,' also with a corded border, and a flounced skirt, parts of which are restored. The Votary's hair, which is longer than that of the other figure, falls down behind her[2] to her hips. Though she is altogether slimmer than the Goddess, her breasts, which are bare, are prominent. She wears a bracelet round the wrist of her right arm which holds out a small snake, tail upwards.[3] The left arm is wanting. The skin here is pure white, the jacket a dark orange with purplish-brown bands, and the rest of the dress shows designs of the same purplish-brown on a pale ground.

There were also remains of a third figure, with skirt and apron exactly resembling those of the Goddess. Of the skirt enough remained to admit of its full restoration, and the parts above, including the 'apron,' metal girdle, and a piece of the jacket and laced bodice were well preserved. The girdle showed the same spiral decoration as the borders of the apron. As in the case of the last figure the hair fell down in long tresses to the hips. We have here, too, to deal with a Votary or attendant rather than with an actual Goddess.

[1] A small fragment of the top of the tiara at the back was also wanting.

[2] Sections are restored in Fig. 57.

[3] The head part is restored in Fig. 57.

These figures, in spite of the mannerism of their fashionable attire, show considerable elegance of modelling and pose and the technical skill revealed in their fabric is little short of marvellous. The foreparts of the arms are fitted on to the rest of the figure by means of small circular rivet-holes

FIG. 57.—FAÏENCE FIGURE OF FEMALE VOTARY: BACK VIEW (ABOUT ½ SCALE).

visible in their section. From the existence of some additional forearms of variant sizes and other fragments it is evident that there were originally more of these figures. The forepart of an arm belonging to one of these,

6·5 centimetres in length, has the tail section of another spotted snake curving along it. The end of this is held in the clenched hand and a bracelet is visible about the wrist. A smaller forearm, 5·3 centimetres in length, is also adorned with a bracelet: the hand here is clenched like the other but there is no snake.

The following Note on the dress of the Goddess and of the Votary (Figs. 56, 57) has been kindly supplied me by Lady Evans:

The Snake Goddess (Figs. 54, 55).

This figure appears to be wearing:—

(1) A skirt, made without gathers, touching the ground evenly all round, decorated with horizontal lines representing either tucks or embroidery or woven stripes in the material. The skirt is bordered with a reticulated pattern at the hem, enclosed within a double line of edging.

(2) A double apron or 'polonaise' made without fulness, reaching to the knee at the back and front, and rising to the hips at the sides. It is not improbably cut as an oval, and the head inserted through a hole in the middle as in the modern 'poncho.'

It is decorated round its edge by a 'guilloche' pattern within plain bands. This decoration may be embroidery. The hem of this garment has the appearance of being slightly wadded or stuffed to produce a rope-like edge. The material is covered with a spotted pattern in relief.

(3) A tight-fitting jacket bodice of rich stuff, decorated, apparently, in embroidery, with a pattern formed of 'volutes.' The short sleeves cover the top of the shoulder and reach half-way to the elbow.

In front the bodice is cut away in a V shape from the shoulders to a point at the waist, leaving the neck and both breasts absolutely bare. From just below the breasts the edges of the jacket seem to be braided in curved patterns, and laced across from this braiding by cords. These cords are tied in bow-like knots.

The front of this jacket is edged all round by a spotted snake.

(4) A high cap or tiara, perhaps of cloth, wound round in spiral fashion.

The hair of the figure falls to the shoulders in long locks, and is arranged beneath the high cap in a 'fringe' of regular strands of hair.

The Votary. Figs. 56, 57.

The outline of this Votary's dress is similar in general character to that of the Goddess, but offers a few variations, viz.:—

(1) The skirt consists of seven flounces fastened apparently on a 'foundation,' so that the hem of each flounce falls just over the head of the one below it. Vertical stripes of a darker colour, of irregular width, appear on hem. The topmost flounce shows two narrow horizontal lines on each hip, probably a 'heading' to finish off the flounces.

(2) Over this skirt is worn a double apron or 'polonaise' similar to that of the Goddess, but not falling so deeply, and not so richly ornamented.

The main surface is covered with a reticulated pattern, each reticulation being filled with horizontal lines in its upper half. The general effect is that of a check or small plaid. A triple line of decoration edges this 'polonaise.' The hem of it is thickened, perhaps by 'wadding.' Seen from the back this thick edge seems to denote a fastening on each hip. The front and side views of the right hip give this fastening (?) the appearance of a thick roll, suggestive of a snake.

(3) The bodice seems to be made of a plain material, and is cut in similar fashion to that of the Goddess, with rather longer sleeves. From the top of the shoulder down the sleeve, and continued at right angles round the arm, runs a line of lighter coloured decoration, perhaps braiding. Instead of the snake edge to the jacket, seen on the other figure, a rope-like border runs round the bodice and also round the sleeves, which terminate just above the elbow. The bodice is cut away so as to expose both breasts, as with the Goddess, and is similarly laced, though the braiding, from which the lacing springs, is not, perhaps, quite so rich.

(4) The snake girdle of the Goddess is replaced on this figure by a stiff belt.

The whole costume of both figures seems to consist of garments carefully sewn and fitted to the shape without any trace of flowing draperies.

The bodies of the figures are closely confined within their bodices, except where they open in front. The lines adopted are those considered ideal by the modern corset maker rather than those of the sculptor.

Of exceptional religious interest are certain miniature reproductions of articles of apparel in the same fine faïence. These in some cases were made for suspension and had certainly a votive significance.

Among them the votive robes claim the first place. The larger of those shown in Fig. 58 is, like the other, in two pieces superposed on one another at the junction of the two curves of the double girdle. Both halves show a small perforation going right down the centre, evidently for the wire or string by which the garment was suspended. The ground colour of the dress is a greenish white, the bands and other designs with which it is decorated being of a purplish brown. The upper part seems to represent a simplification of the jacket and bodice seen on the Goddess and her attendant. The girdle is formed of a double roll which answers in position to the two twined snakes that encircle the Goddess and which perhaps symbolise similar serpentine coils. The skirt shows below a kind of arched canopy containing a clump of flowers, apparently crocuses, a row of which is also seen along the fringe below. It must, however, be remarked that though the flowers themselves seem to be of this native Cretan species—which supplied a favourite motive to the contemporary painters of decorative frescoes[1] and vases—the whole grouping

[1] The Crocus-gatherer fresco seems to belong to the First Period of the Later Palace. Crocuses are found on the vases of the same transitional period and were also a favourite subject in Melos.

Fig. 58.—Votive Robes and Girdles of Faience.

suggests the conventional lotus clumps of Egyptian religious art. We have here a clear example of the translation of a Nilotic subject into indigenous Minôan terms.

The height of the upper and lower robes together is in this case 23 centimetres (about 9¼ in.). There was also found a part of a larger votive dress of the same character which when complete must have been about 30·5 centimetres in height.

The smaller robes seen in Fig. 58 were, when complete,[1] about 14 centimetres in height. Their general features resemble those of the first described. The skirt exhibits the same reserved decorative space analogous to the 'Watteau panel' of much later fashions. The crocus tuft is here more elegant and the cinquefoil arch above it with its four cusps presents a curiously Gothic aspect.

It may safely be said that had it not been for the light thrown on the subject by the complete sets of vestments above described the remaining articles of votive apparel illustrated in Fig. 58 might have remained a lasting enigma. As it is, they are at once seen to represent the double girdle which divides the skirt from the body of the robe. One of these votive girdles is decorated with crocus flowers like those of the 'Watteau panels' above mentioned, terminating in spirals; the other displays a design consisting of asterisks and rosettes. A third, of which only a fragment is preserved, shows a vandyke pattern.

The parallelism between these girdles in the shape of double rolls and the snakes encircling the hips of the Goddess has been already noticed. The fact that miniature reproductions of such girdles were used by themselves as votive objects seems to invest them with a special ritual significance. They are not themselves made to represent serpents, but the suspicion arises that the original rolls from which these are copied may actually have contained some form of mummied snake.

The cult of the Snake Goddess, with which we have here to deal, has been already illustrated, under a ruder aspect, indeed, on Cretan soil. In the Minôan Settlement at Gournià Miss Harriet Boyd found the remains of a small shrine containing some coarse images of a Goddess rising from a cylindrical base,[2] about which serpents were

[1] The upper part of the jacket is restored in Fig. 58.

[2] Compare the Dove Goddess found in the shrine of the Double Axes at Knossos (*Report*, &c., 1902, p. 98 *seqq.*).

coiled.[1] A still later version of the same half aniconic type of cylindrical figure with snakes was found by Professor Halbherr in the cemetery of Priniàs near Gortyna.[2]

The snake's head rising above the summit of the tiara in the present figure[3] naturally recalls the uræus as seen above the heads of Egyptian divinities and royal personages. A winged serpent or asp by itself appears as the representative of Nekhebet, identified by the Greeks with Eileithyia, the Goddess of Childbirth, and of her twin sister the 'Nurse' Uatchet or Buto. Its connexion with the Egyptian Mother Goddess Hathor derives a special importance from the fact that, as I have elsewhere shown,[4] the Hathoric staff with two serpents coiled round its foot supplies the prototype of the rayed pillars with similar snakes on Cypro-Mycenaean signets, in association with a Goddess whose attributes are lions and doves.[5]

Of the influence, at least of the formal creations, of Egyptian religious art on that of Minôan Crete there can be no doubt. The griffin and the sphinx, however transformed, were not of insular origin. That the native beast-headed demons were crossed by the Egyptian hippopotamus Goddess and other similar forms is now clear.[6] The *ankh* itself was adopted by Minôan symbolism. Neither can there be any hesitation in regarding the Cow and Calf reliefs found in the same Temple Repository with the Snake Goddess and her votaries as taken over from the service of Hathor. Even the clumps of native crocuses that here decorate the votive robes are, as has been already pointed out, simple adaptations of Egyptian lotus clumps.

That the cult imagery of one or other of the Egyptian Mother Goddesses may have reacted on that of a parallel divinity in Minôan Crete would thus be quite in keeping with other ascertained phenomena. But the argument can hardly be carried beyond this point. Taken as a whole neither the Snake Goddess nor her votaries present any special Egyptian

[1] This shrine is perhaps contemporary (as most of the remains at Gournià) with the First Period of the Later Palace at Knossos. (In my *Report*, &c., 1902, p. 105 it is referred to as later.)

[2] For an excellent account of these see S. Wide, *Ath. Mitth.* xxvi. pp. 247–257 and Pl. XII.

[3] The head of the snake, as seen in Fig. 54. is restored, but there is no doubt whatever as to its position.

[4] See *Myc. Tree and Pillar Cult*, pp. 52, 53.

[5] See below, p. 87.

[6] Compare the shell relief found by the Italian Mission at Phaestos (*Mon. Ant.* vol. xii. Tav. VIII. 1 : *J.H.S.* xxii. p. 92, Fig. 33, on which Mr. Hogarth justly remarks, 'A glance is enough to assure any one familiar with Egyptian art that these figures are first cousins of those Nilotic divinities whose one arm is raised in exactly the same pose while the other holds the ankh.'

characteristics. As a matter of fact they are clad in the last fashions of the Knossian Court.

The pronounced matronly forms of the Goddess seem to point to her as a Great Mother, and resemble those of the female member of the divine pair whose cult is so well illustrated throughout the Palace, including the Repository in which the figure itself was found. It may be added that the sacral value of the girdle, emphasized here both by the plaited snakes that encompass the loins of the divinity and by the appearance of the girdle as a separate votive object, points to a Goddess of Maternity. The snake form of Nekhebet, the Egyptian Eileithyia, has also a comparative value in this connexion. Nor must it be forgotten that some of the oldest religious traditions of the spot that survived to Classical times refer not only to the cult of the Mother Goddess Rhea, whose grove and the ruins of whose shrine were pointed out near the later Knossos, but to Eileithyia, whose cave sanctuary opened on the side of a rocky height above its ancient haven, the mouth of the Amnisos.[1]

Of the special cult aspect presented by the Snake Goddess and her votaries no other hint has as yet been supplied by the Palace remains. It is possible that we have here to deal with a specially chthonic aspect of the cult of the same Mother Goddess whose worship is otherwise so well illustrated here. Or, on the other hand, the Snake Goddess may represent an associated divinity, a *σύμβωμος*, having a shrine of her own within the larger sanctuary.

In either case the snakes must by all analogy be taken to show the chthonic character of the worship here represented. It is an obvious feature of primitive cult that, just as the bird descending on the sacred object or person is the outward and visible sign of its possession by a celestial spirit, so the serpent approaching from the crevices of the earth becomes, as at Delphi, the sign of its spiritual possession from the Underworld. The two chief cult images as yet found in the Palace illustrate these alternative sources of inspiration in an interesting way. In the one case a dove is seen settled on the head of the image. In the case of the present figure the snake's head appears in the same position. The parallel, indeed, may be carried a step further if we compare the semi-aniconic images of Gournià and Priniàs with the triple columns of the terracotta sanctuary found on the East side of the Knossian Palace. In the case of the columns

[1] *Od.* ix, 188, 189.

the settled dove again witnesses the divine possession. In the case of the images the snakes are seen coiling up the cylindrical base, which seems to represent the earlier columnar form of the cult object.

It is hardly necessary to point out that a Mother Goddess has essentially a chthonic side. Demeter, daughter of Rhea, whose early connexion with Crete comes out in the Homeric hymn,[1] is herself, in her character of Erinys, a Snake Goddess. The Cretan Eileithyia is a cave divinity. It is, moreover, interesting to notice that the indigenous Nature Goddess of the island, who retained her Eteocretan names Dictynna and Britomartis to Classical times, was also identified with Hekatê.[2]

This indigenous Goddess, of whom Rhea as well as Artemis may often be regarded as the Hellenised equivalent, belongs to the very ancient class of Virgin Mothers. She presides over human births and fosters the young both of land and sea. Like Artemis, she combines the attributes of nurture and of the chase. On Cretan coins we see her in the place of Rhea, guarded by the Corybantes, with the infant Zeus at her bosom.[3]

Various elements in the present deposit seem to illustrate different sides of a similar cult. The votive arrow plumes[4] belong to the huntress. The sacred shield of the God and his Corybantes is repeated round the margin of the votive bowl.[5] The fruit and flowers, shells and fishes, and notably the cows and goats suckling their young, illustrate the cult of a Nature Goddess; while the seal-type exhibiting the flying dove may be taken as an allusion to her more amorous side. On the other hand, the repetitions on the seal impressions of the figure of a Warrior Goddess attended by lions bring us very near to Rhea; and the companion piece, showing the Warrior God, can hardly be other than an early version of the Cretan 'Zeus.'

The general associations in which the figure of the Snake Goddess and her votaries were found, are thus seen to illustrate certain broad aspects of the ancient Cretan cult, of which a living tradition survived to historical times. The last examples especially, the lion-guarded Goddess, namely, and her male satellite fit on to the typical cult of the Palace and

[1] *In Cer.* 123, 124.

[2] Τινὲς δὲ (Βριτόμαρτιν) τὴν αὐτὴν εἶναι τῇ Ἑκάτῃ, *Schol. ad Hymn. Orph.* XXXVI. v. 12. According to another account Britomartis was daughter of Hekatê, Etymol. M. *s.v.* Βριτόμαρτις. Cf. Hoeck, *Creta* ii. p. 175. Britomartis, according to a mystic tradition, was the granddaughter of Eubulos (*Diod.* v. 76, 3).

[3] See above, p. 62 and note 2. [4] See above, p. 61, Fig. 40. [5] See above, p. 72, Fig. 49.

of Minôan Crete as a whole. It may therefore be preferable to regard the Snake Goddess not as a separate religious entity but rather as a chthonic version of the same matronly divinity otherwise so well represented on this and other Minôan sites. According to this view we have here the contents of a small separate shrine, forming part of the larger Sanctuary, the evidence for which has been sketched in a former Section. But the Goddess herself seems to be essentially the same as she who is elsewhere shown in the seal impressions of a neighbouring chamber of this Sanctuary, standing on her sacred peak with her pillar temple behind her. Sometimes we see a similar figure bearing a double axe, sometimes it is held aloft by her votaries, and on the great signet of Mycenae the same Mother Goddess is shown seated beneath her sacred fruit-tree, while the *labrys* emblem appears in the sky above.

In this connexion it must further be observed that the female figures found elsewhere at Gournià with snakes ascending their cylindrical bases are the ruder counterparts of the semi-anthropomorphic Goddess of the small shrine of the Double Axes found in the South-Eastern Quarter, save that in this case she stands in association with the dove in place of the serpent.

It would even appear that the lion-guarded Goddess is essentially the same as she whose emblem is the dove. The Cypro-Mycenaean cylinders, which supply an illuminating commentary on many religious types of Minôan Crete, are here specially valuable. On these the Goddess, guarded or adored by lions, is also seen at times holding a dove, while in many cases she is associated with the sacred rayed pillar—her alternative aniconic shape—round which two serpents twine. Thus the earliest records of the Lady of Paphos show that we have to do with essentially the same Nature Goddess that was worshipped in Minôan Knossos, while the Paphian temple itself, as traditionally figured, with the doves settled above its opening, seems to represent the survival of the pillar shrines of Knossos and Myeenae. Only at Knossos the records of this cult reach back far earlier than in Cyprus, and the evidence as it at present stands certainly tends to support the tradition preserved by Diodôros that it was from a Cretan source that the cult of Aphroditê spread alike to Paphos and to the Syrian coast; to Kythera and to Eryx.[1] The Cretan Aphroditê Ariadnê, as is well known, was worshipped at Amathus.[2]

[1] *Diod.* v. 77. 5.

[2] Paeôn of Amathus, in Plut. *Thes.* c. 20. Ariadnê had there a sacred grove and grave.

§ 15.—The Temple Repositories; Marble Cross and Cruciform Symbols.

The two cruciform symbols found on the seal impressions from the present deposit have a high interest. One of these, the 'Swastika' or *Crux gammata*, appears in the field of a seal impression, Fig. 59, of which eighteen examples occurred, including two varieties. It is there placed over a horned sheep exactly resembling the animal seen on a seal-type found in the Pictographic deposit of the Palace, in that case performing the functions of the goat Amaltheia to an infant beneath it (see Fig. 60). If this latter design covers, as may well be inferred, an allusion to an alternative form of the legend of the nurture of the infant Zeus,[1] the

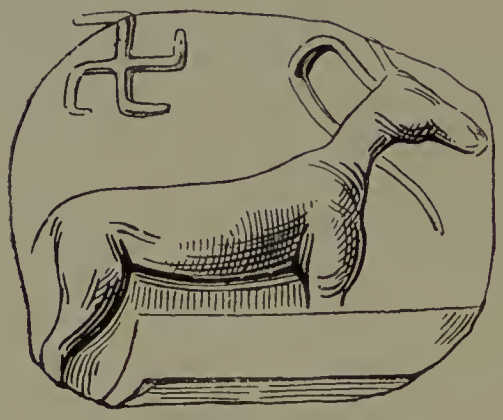


Fig. 59.—Clay Seal Impression from Temple Repository. Swastika and Horned Sheep ($\frac{3}{1}$).

Fig. 60.—Clay Seal Impression from Pictographic Deposit. Infant and Horned Sheep ($\frac{3}{1}$).

appearance of this religious symbol above the same animal on the seal impressions from this Temple Treasury has a high significance. The animal in any case may be naturally taken to stand in a close relation to the primitive Mother Goddess, whose cult is otherwise so well illustrated by this deposit.

The question naturally arises,—was the Swastika a special holy mark of the local Minôan cult? Such old religious emblems show great persistence. It is certain that the earliest 'Labyrinth' designs on the Knossian coins are little more than a slight development of this symbol. It may, moreover, be reasonably asked whether the recurring sign.

[1] See *Myc. Tree and Pillar Cult*, pp. 31, 32.

which on the Greco-Roman coins of Minôan Gaza symbolises the cult of Zeus Krêtagenês and his Consort and which sometimes forms the principal type,[1] is not rather a simplified *Crux gammata* than an abnormal form of the Semitic *mem*.[2] If we now turn from the Easternmost to the Western-most traditional arena of Minôan enterprise, a parallel phenomenon of great interest meets our view. In Western Sicily, where Minôs himself met with his legendary fate, his tomb was significantly marked by a shrine of that Aphroditê[3] whose chief sanctuary at Eryx represented to a much later time the essential features of the worship of the Knossian Goddess in her character of Lady of the Dove. It must therefore be regarded as a highly suggestive fact that on the coins of the Cities of Elymian Sicily the Swastika is set beside the head of the Goddess or above her sacred hound as a special symbol of the cult.[4] In Paphos it is the *Crux ansata*.

At Eryx the Swastika symbol alternates in the same position with a star, that very universal mark of divinity. But the star-sign in the pictographic systems of primitive peoples is very generally a plain cross,[5] of which the *Crux gammata* itself is only a slight development. The simple 'Greek' cross as a star symbol of religious import is found in Egypt as a mark of Hathor.[6] At times also we see it replacing the stars above the heads of the Dioskuri.[7] With a longer foot it is seen as a symbol of Astartê on coins of Sidon, Berytus, and various Phoenician towns; and in connexion with Tanit throughout Punic Africa where the sacred significance of this type was afterwards to be perpetuated by Latin Christianity,

On a series of seal impressions from the present Repository a cruciform design appears as the sole type (Fig. 61). It seems natural to regard this

[1] Stark, *Gaza*, Plate, Fig. 1.

[2] Interpreted as an allusion to the Semitic epithet of the God: *Marna*, or the Lord.

[3] *Diod.* iv. 79, 3.

[4] On the obols of Eryx dating from about 450 B.C. above the dog. On the didrachms of Motya and Panormos of about the same date, beside the Goddess's head, and, again, beside the head, on the coins inscribed *Ziz*, belonging to one or other of the Elymian cities. The hound, which here is the sacred animal, appears from certain Minôan seal-types to have been early connected with the cult. Another frequently recurring religious emblem associated with the Aphroditê of Eryx is the Triton shell (wrongly described as a 'Murex') so significant in the Minôan ritual.

[5] See, for instance, Garrick Mallery, 'Pictographs of the North American Indians' (*Annual Report of Bureau of Ethnology*, 1882–3, pp. 238, 239).

[6] Thus the body of Hathor, as the Night Sky, is at times seen covered with crosses in place of stars (Budge, *The Gods of the Egyptians*, i. 430).

[7] On coins of the Syrian Tripolis. On the cruciform types of the star symbol, see especially L. Müller, *Religiøse Symboler af Stierne-, Kors-, og Cirkel-form hos Oldtidens Kulturfolk*, p. 7 *seqq.*

as a religious symbol of the same kind as the Swastika of the other seal-types, and to see in this also an adaptation of an original star-sign.[1] As an eight-rayed figure we find the star symbol constantly recurring in connexion with Minôan religious types above or in place of the baetylic pillar.

It has already been noticed [2] that a type of cross with a small base to each foot—the cross pattée—occurs as the distinguishing mark of a small series of Magazines on the Southern border of the Palace section that seems to have contained its principal Sanctuary. On some blocks, apparently belonging to the Earlier Palace, a plain deep-cut cruciform sign with equal limbs and others ×-shaped are also found, and these types recur at Phaestos.[3]

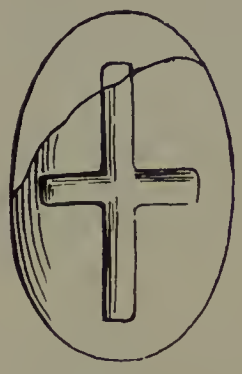


Fig. 61.—Clay Seal Impression with Cruciform Symbol, from Temple Repository.

The Double Axe symbol cut on the Palace blocks finds its material counterpart in the fetish Double Axes of the Palace shrines. But even this analogy could hardly prepare us to bring to light from this Temple Repository, over and above the sealings with the cruciform symbols, an actual cross of fine veined marble and of orthodox Greek shape (Fig. 62). The colours of the marble are white and dark grey. The width of the cross is about 22·2 centimetres (8¾ inches), and its thickness is very slight, only 1·2 centimetres, or somewhat less than half an inch. The face was finely polished, but the under side is less finished, and there are visible on it incised lines running parallel to the ends of the limbs at somewhat uneven distances from them.[4] A part of one limb had been broken off, but there can be no reasonable doubt that it finished off as the others, and as it is restored in Fig. 62. It is evident from the comparatively rough back that the cross was applied to some other object.

Taken in connexion with the cruciform symbols with which it was associated on the seal impressions,—themselves probably originally attached to priestly documents,—it seems a possible conclusion that, in the small shrine to which the various objects found here *ex hypothesi* belonged, the

[1] A similar cruciform figure occurs as a character of the Linear Script. Compare, too, the Egyptian ☥, the early Dynastic form of which is an equal-limbed cross.

[2] See above, p. 36.

[3] L. Pernier, *Scavi*, etc., *a Phaestos* (Roma, 1902), p. 90.

[4] At a distance, respectively, of 3·8, 3, and 2 centimetres from the edges of the three complete limbs.

marble cross stood in the same position as the central aniconic object of cult as, elsewhere, the Double Axe or the pillar idol. The character of the images found with it indeed suggests a curious parallelism with those of the Shrine of the Double Axes. On the raised base of that shrine, which was found with the original arrangement intact, the Dove Goddess stood on one side of the central objects of cult,—there the Sacral Horns, whose sockets held the handles of the fetish axes,—while on the other side of the same objects a votary held out a dove towards her. In the present case we have on the

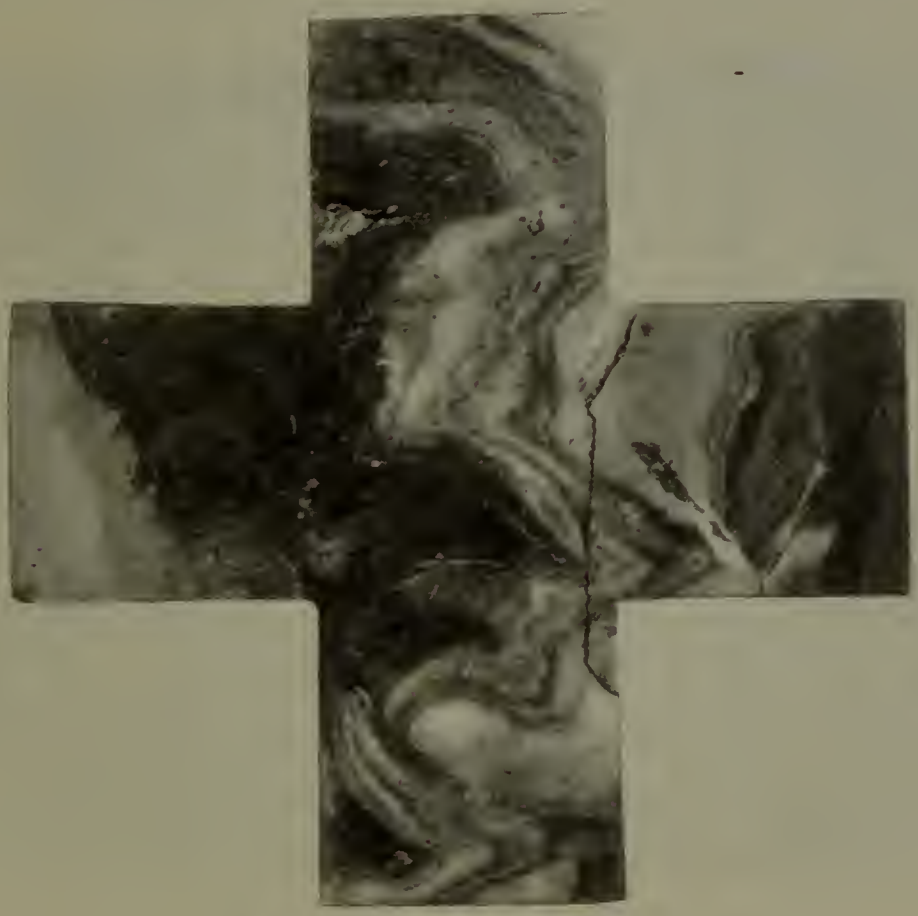


FIG. 62.—MARBLE CROSS FROM TEMPLE REPOSITORY.

one hand a Snake Goddess, on the other a votary holding out a snake. Where, then, in this case, is the central cult object of aniconic character that, according to the exact analogy supplied, must have stood between them? May we see it in the Marble Cross?

The parallelism seems so natural that, for illustrative purposes, I have ventured to group the objects as shown in Fig. 63.[1] The fetish Cross is

[1] The exposition of the objects is necessarily very incomplete. It was, for instance, impossible to set up the faïence reliefs and inlays that probably decorated the walls.

here placed in the centre. The Snake Goddess stands on one side of it and the votaries on the other, while the votive robes are suspended above, and various articles of altar decoration are distributed about. In place of the rounded pebbles that paved the other base, a few of the artificially tinted sea-shells are here placed in the foreground.

That the small Marble Cross, which, in this view, formed the central cult object in this particular shrine, was placed in an upright position, though doubtless applied to some other material, appears probable from

Fig. 63.—Shrine of Snake Goddess with Marble Cross as Central Cult Object. Conjectural Arrangement.

another interesting piece of evidence. A pair of schist moulds found at Karydi, near Palaikastro, in East Crete in 1899,[1] show a series of objects and figures illustrative of Minôan cult. There are here a figure of a Goddess holding a Double Axe in either hand; another similar figure of a Goddess holding a kind of spray in either hand and with another

[1] Described and illustrated by Dr. Stephanos A. Xanthudides in Ἐφ. Ἀρχ. 1900, p. 26, *seqq.*, Plates 3 and 4.

rising from her head ; two small Double Axes and a miniature representation of the Sacral Horns, and two other objects which, by their association, evidently belong to the same cult. One of these is a kind of rayed wheel, an obvious solar emblem. The other is a circular disk held up by another small female figure, whose conical base serves as its pedestal. Round the borders of this disk runs a dotted circle, within which below is a crescent sign—certainly of lunar significance. Within the inner circle, and forming the central design of the whole, is a small cross with equal limbs. The associated emblems of the sun and moon show that here again we have the cross as a star-sign, which in this case appears set up as a central feature of a cult object. The rayed 'wheel,' which in this religious group represents the solar aspect of the cult, is indeed itself better described as a cross within a rayed circle. For the combination of the cross, the original star-sign, with the rayed circle as emblematic of the sun, goes back to the very beginning of pictography, and to a time when wheels in the modern sense were unknown. It may be added that a small gold object in the form of a Greek cross with a border was found in a chamber adjoining the Megaron[1] of the Palace of Mycenae and a somewhat larger object of purple faïence was found in the Palace at Knossos in 1901 (Fig. 64). These would appear to have been amulets connected with the same cult.

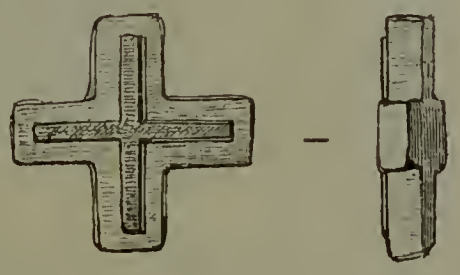


FIG. 64.—CROSS OF PURPLE FAÏENCE.

This converging evidence pointing to the fact that a cross of orthodox Greek shape was not only a religious symbol of Minôan cult,[2] but an actual object of worship, cannot but have a profound interest in its relation to that later cult of the same emblem which still holds the Christian world. The long survival of the allied *Crux gammata* symbol, which seems to be traceable in later offshoots of the Minôan religion from Gaza to Eryx, affords some presumption that the simpler cruciform type may have also retained an abiding sanctity. The deep underlying influence of this

[1] Tsountas, Ἐφ. Ἀρχ. 1897, Pl. 13, Fig. 26, p. 170.

[2] The cross as a symbol or amulet was also known among the Babylonians and Assyrians. It appears on cylinders (according to Professor Sayce, of the Kassite Period), in front of seated gods (cf. *Cat. De Clercq*, No. 254, 255, Pl. XXV.), apparently as a sign of divinity. As an amulet on Assyrian necklaces it is seen associated as on the Palaikastro mould with a rayed (solar) and a semi-lunar emblem—in other words it once more represents a star.

early Cretan culture in the East Mediterranean basin, the evidences of which are constantly accumulating, opens out possibilities on which it is here unnecessary to insist. It must, moreover, be borne in mind that the equal-limbed Eastern Cross retains the symbolic form of the primitive star-sign, as we see it attached to the service of the Minôan divinities.

§ 16.—Deposit with 'Early Minôan' Ceramic Types.

The platform on which almost the whole of the Western wing of the Later Palace rests represents the planing off of earlier strata, including the top layers of the Neolithic deposit. The floor levels of 'the Later Palace' thus rest directly on the Neolithic clay, very little belonging to the earlier, intervening Minôan Age being traceable, except where such remains were found in pits or cists excavated, during that intermediate time, in the original Stone Age deposit. A small pit of this kind was found immediately under the pavement of the entrance to the 'Room of the Stone Vats' that opens on the North side of the East Pillar Room, the contents of which proved to have an exceptional value in illustrating the character of the Minôan culture that followed directly on the Neolithic.

The bulk of the contents of the pit, which descends to the depth of about a metre, belonged to the actual period of transition and to the beginning of the Cretan metal age, to which the name of 'Early Minôan' may conveniently be given. Superposed, however, on these earlier remains were a certain number of objects which come at least within the limits of the first part of the succeeding 'Middle Minôan' Age, when the Ceramic art was more fully developed and the fine 'egg-shell' ware was already coming into use.

To this later, Middle Minôan, element of the deposit unquestionably belonged:

(1) Some fragments of clay seal-impressions. One with part of a pictographic inscription (arrow sign alone clear: somewhat archaic form); another with ribbed circular border often found on 'signets' of the period; another with part of a pattern of the same class as others found in the Earlier Palace chamber beneath the Olive Press Room.

(2) A cup (Fig. 65 *f*) of inverted conical shape with a flat base, very slightly concave below. The outer surface of the cup is covered with a black slip on which

are narrow bands, four white and two vermilion-red, running up spirally from the stem. The cup is of fine 'egg-shell' fabric.

(3) Handled bowls (fragmentary remains of two or three of which are seen in Fig. 65), showing horizontal white lines on a dark brown and black slip. The white lines cross the handle diagonally. The walls of these bowls are extraordinarily thin; about 1 millimetre in section.

(4) A very fine flat-bottomed cup, 10·2 centimetres high, gradually expanding from the base. It shows the natural surface of the clay, red above and black towards the base. Of very fine fabric, the walls between 1 and 2 millimetres in thickness. The occurrence of this type of cup is of interest, since it is identical in shape, fabric, and even in the character of its firing, with a series of cups found in a large jar under the floor of the First Magazine. (See *Report*, &c., for 1901, p. 48.)

FIG. 65.—VASES FROM EARLY DEPOSIT NEAR EAST PILLAR ROOM.

(5) A cover (Fig. 65 *m*) with perforation and white cross lines on a brown slip (9·4 centimetres in diameter).

To this later phase of the deposit also probably belong the remains of a mosaic of shell plaques and a petal-like plaque of faïence. It is also possible that some vases of coarse alabaster belong to the closing period of the deposit. A lid with a stud-like knob somewhat resembles a steatite example of XIIth dynasty date from Kahun.

Among the objects that seem to represent the most archaic elements of this deposit ('Early Minôan') may be mentioned the following :—

(6) Black-faced pyxis (Fig. 65 *b*) with three short feet and triangular ornamentation of incised lines filled with a white chalky substance, perhaps pounded gypsum. Four holes round rim to fasten lid. Diameter 18 centimetres, height 9·5.

(7) Fragment of lid of another black-faced pyxis (Fig. 65 *a*), with punctuated and linear decoration showing similar white filling.

(8) Lid of black-faced pyxis (Fig 65 *c*), with incised chevrons and vandykings, enclosing punctuations. Traces of the same white filling. Diameter 15·5 centimetres.

Fig. 66.—Vases from Early Deposit near E. Pillar Room.

(9) Two-handled jar with round mouth, 31 centimetres high, reddish colour of the clay. On the front, incised rectangle with diagonal lines (Fig. 66 *o*).

(10) Similar jar, 29 centimetres high ; a pale clay colour above black below, a red band round rim. The same incised decoration on the front (Fig. 66 *c*).

(11) Jar with four handles rising from shoulder, 15·5 centimetres high. It is covered with a polished reddish-brown slip with white bands and decoration. On the upper border, between two white bands, is a white design consisting of two obtuse triangles with interior hatching, the apices of which are united. This

design is the translation into colour of the incised pattern on Nos. 9 and 10 (Fig. 66*a*).

(12) Upper part, apparently, of larger jar of the same class as the preceding except that two of the handles are at a higher level than the other pair. This vase is covered with polished brown slip with white designs, including the same pattern as the preceding. In addition to this are white circles with interior hatching. Inside, the jar shows the plain pale buff colour of the clay (Fig. 65*g*).

(13) A series of nine vases with high spouts cut off flat at the top, varying in height from about 12 to 20 centimetres. The ground here is the pale buff colour of the clay on which are painted in dark brown slightly lustrous pigment, in addition to the usual bands, hatched 'butterfly' designs, the immediate derivatives of the double-triangles seen on the preceding (Fig. 66*b*, *d*, *f*).

These vases were in several cases finished off to the required tapering form below the shoulders by means of paring, with a somewhat lateral motion. This paring process is also very characteristic of the cups of the same period.[1]

(14) Vase of the same type as the last, but with decoration in the form of two arches consisting of dark brown curving bands on the plain buff clay (Fig. 66*k*).

This seems to supply the prototype for the arched decoration of an advanced polychrome vase of 'Middle Minoan' character found with XIIth dynasty remains at Kahun.[2]

Certain cups and other small vessels, showing the same paring of their lower circumference, must also be referred to the earlier period of this deposit. Other plain vases of somewhat rough execution are more difficult to place.

The *pyxis* and lids of this deposit, with their incised and punctuated decorations showing the white filling, are of special interest as affording a link of connexion with the earliest Metal Age of the Cyclades. Similar *pyxides* in Amorgos, Melos, Paros and elsewhere are the frequent concomitants of tomb groups further characterised by the marble figures and vases of the regular Cycladic style. The incised and punctuated decorations here shown also agree very closely with those of ceramic fabrics of this more northerly Ægean group. The ornament of the complete lid, for instance, No. 8 above (Fig. 65*c*), shows a decided parallelism with that on the back of a clay 'mirror' from Syra.[3] These correspondences point to an approximate synchronism between the transitional Early Minôan Period and that phase of Cycladic culture which is marked by the first beginnings of metal. It is however noteworthy that on the Cretan ceramic types represented in the present deposit there is no trace of the spiral decorations found in the parallel Cycladic group, at least on its more advanced products.

As illustrating the evolution of the primitive geometrical painted

[1] Cf. Mackenzie, 'The Pottery of Knossos,' *J.H.S.*, xxiii., p. 166.

[2] Petrie, 'Egyptian Bases of Greek History,' *J.H.S.*, xi., Pl. XIV., Fig. 6.

[3] Tsountas, Κυκλαδικά II., Pl. 9, 4.

designs from the earlier incised patterns, this deposit has a quite unique value. The incised rectangle with diagonal lines, forming an × within it, seen on Nos. 9 and 10, is transformed before our eyes into the double triangle of the painted jars Nos. 11 and 12, and again into the similar 'butterfly' pattern of the vases grouped under No. 13. This painted double triangle or 'butterfly' design recurs on fragments of vases found low down in the early basement described in Section 3: an interesting proof, as already noted, that its construction goes back to the 'Early Minôan Period.'

Amongst other objects found in this deposit were some much oxidized pieces of copper or bronze, an obsidian block, containing nests of crystals, obsidian knives, a fragmentary crystal relic, like a solid thimble,[1] a small piece of gold plate and a quantity of beads of faïence or native porcelain. The smallest of these are of a deep cobalt blue. The other

Fig. 67 *a* and *b*.—Early Dynastic Egyptian Vase of Syenite, from Palace.

bugles and globular beads with a very large perforation are of a pale bluish or greenish hue resembling the Egyptian faïence of the Early Dynasties. These beads are absolutely distinct from those found in the Temple Repository, and the nearest Egyptian parallels seem to date from the Sixth Dynasty.

Of the early connexions of the Knossian site with Egypt another significant proof has been made out this season. In the same Palace region, on the border of what was at first known as the 'Central Clay Area,' there had been found in 1900 a stone vessel (Fig. 67) which was at first set down as one of the Cretan imitations of Egyptian forms. Prof. Petrie, however, who had an opportunity of inspecting it last spring in the Museum at Candia, at once recognised that it was formed of Egyptian syenite and

[1] Diameter at top 1·8 centimetre.

that it represented an actual article of import belonging to the period of the first Four Dynasties.

§ 17.—THE STEPPED THEATRAL AREA.

A little North of the North-West angle of the Palace an irregular paved area had been brought to light in 1901. This area was traversed by a section of a paved path or causeway running from West to East towards the Northern entrance of the Palace, and from which a branch causeway, somewhat narrower than the other, starts in a North-Easterly direction towards the Pillar Hall that immediately faces the Northern entrance passage. Near the point where these two causeways bifurcate, at a distance of about 14 metres North of the North-West Palace angle, a corner of low walling had been exposed to view which was flanked by a part of the irregular paved area above described, and at the same time very closely bordered by the broader causeway coming up from the West.

This low wall of limestone blocks with its well preserved corner to the South-East invited investigation and proved to belong to an approximately square construction about 5·2 metres by 5, which it was at first thought might represent the base of a large altar.

Trial pits sunk a little to the North of the first discovered angle of this construction produced only negative results. A pit dug about 10 metres to the North-West however exposed to view at a depth of 2·30 metres what appeared to be two strips of paving. Further enlargement of the pit proved that in fact we had here to do with lines of steps, entailing a comprehensive exploration, the final results of which were as new and surprising as any as yet produced by the Palace site.

Section by section a large stepped area was brought to light, the plan of which is shown in Fig. 68. It will be seen that the general plan consists of a paved area bisected by another causeway, and overlooked on two sides by tiers of stone steps, between which the square block already mentioned, and which proved to have been paved above, stands as an intervening point of vantage.

Of the two flights of steps or seats that to the East was the higher, consisting of eighteen tiers. The Southern flight appears to have been originally broader but the greatest number of steps here is six, decreasing on the Western side to three. The reason of this decrease is to be found

in the paved causeway first mentioned, which in its Westward descent cuts this flight of steps diagonally. A central entrance way communicating with a broad causeway running due South further breaks this Southern flight into two divisions. The section East of this entrance for the greater part of its extent shows six tiers of low seats or steps; that to the West, so far as it is preserved, only three. A remarkable feature of the Western section is a barrier along its top border, consisting of low tiers with narrow openings between them separating it from the upward course of the causeway beyond.[1] Another feature of this Eastern section was the gradual decrease of the depth of the tiers of steps or low seats as they ascended. The lowest was 80 centimetres, and the depth of the other five follows in decreasing order, 70, 63, 56, and 45. The top row may have been reserved for children. The mean height or tread of the steps is 18 centimetres; higher by almost a third than the steps of the Eastern flight.

At the central entrance, in place of the two uppermost tiers of steps, there are substituted slabs of limestone with a slight incline, while four lower gradations are preserved. West of this entrance, as already noticed, only the three lowermost tiers are continued. These were traceable in this direction for a distance of nearly four metres, but beyond this point had been completely destroyed by later structures.

How far did they originally extend? A clue to the answer is given by the fact that the outside causeway in its Westward descent would have cut into the uppermost of the three tiers at a point about 6 metres West of the entrance, a distance which approximately squares with the width of the Eastern section of the steps. At this point moreover the line which would have been reached by the Western section thus prolonged is crossed by a line of wall. That the upper part of the wall in its existing state is of somewhat later construction is clear from the fact that it was carried over the paved causeway. But there is distinct evidence that this wall was partly built on an older foundation, and its North end, in fact, terminates in a gypsum pier of good masonry which seems to have

[1] The system consists of blocks of limestone alternating high and low. The best preserved of the higher blocks is that against the bastion, the other being much weathered and worn away. The thickness of the construction is only 36-40 centimetres. The first 'pier' is 60 centimetres in length: then follows a lower block 67 centimetres long; then two higher blocks 70 and 72 centimetres in length respectively with an interval of 45 between them which seems to have been originally filled. Beyond this, apparently there was another lower interval followed by a similar longer 'pier.' The higher blocks were at most 37 centimetres high and the lower 12 centimetres.

represented one pillar of a central entrance to the area itself on the West side. The paved path which leads to this area from the West and, as will be seen, symmetrically divides its rectangle into two equal parts, enters it immediately in front of this pier.

These combined indications make it reasonable to assume that the Western section of the South steps ended at this point and was symmetrical in width with the section East of the Central entrance on that side. It would thus appear that the original breadth of the three lowest tiers [1] was about 16·50 metres; that of the fourth step—which was continued to the Western limit of the entrance passage—about 9·50 metres; and that of the fifth and sixth, 6 metres.

The square bastion which has been already mentioned as occupying the angle between the Southern and Eastern flights of steps is faced on its West side by a lower ledge of masonry which steps down Northwards. The bastion itself is built of good limestone masonry, four courses of which are preserved at its North-West angle. Upon blocks of its Southern side are cut two signs, the Double Axe and the branch, in the style of the first period of the Later Palace.[2] The upper surface of the bastion showed remains of good paving, on a level with the topmost step of the East flight, and near here were found some fragments of painted stucco. It looks as if this raised platform may have been surmounted by a decorated canopy. From its commanding central position it was the point best adapted for surveying any shows that may have taken place in the area below, and we may perhaps regard it as having served as a kind of Royal Box.

From the North-Eastern corner of this bastion, which corresponds with the sixteenth step of the Eastern flight, a stone runnel, altogether similar in construction to that of the Eastern Bastion of the Palace,[3] follows the edge of the descending steps in a series of parabolas.[4] At the

[1] Excepting a small strip cut out of the first step by the keying in of the lower steps of the Eastern flight.

[2] They are somewhat finely cut, but of the usual calibre. The axe is 20 centimetres in width. In the neighbouring Palace area were also found broken blocks belonging to earlier constructions with a Double Axe of archaic form, a deep-cut 'star' sign 26 centimetres in diameter and a 'zigzag' sign also deeply cut, 26 centimetres by 3.

[3] See *Report*, &c., 1902, p. 111 *seqq.* and Figs. 67, 68. Another similar runnel was found this year by the remains of a staircase in the South-East quarter, below the 'Court of the Sanctuary.'

[4] Dr. Mackenzie observes that 'the highest point of the parabolic curve comes at the transition from one step to another.'

lower corner of the bastion, by the sixth step, the runnel takes a turn South and is joined by a smaller tributary channel of the same kind which runs beside the West face of the bastion, following the descent of the Southern flight of steps.

A remarkable feature of the present structure is the manner in which the lower steps of the East flight overlap the lower corner of the bastion and are keyed into those going up South. Something analogous to this is visible in the Palace at Phaestos, where the two lowermost steps of the broad flight leading up to the great upper Megaron are brought forward beyond the angle of the side wall and intrude on the line of the flight of steps leading up North.[1] In the present case it looks as if the architect had been fumbling about for the idea of seats carried round in a continuous semi-circle but had not hit upon it. In this respect there is no approach to the later theatral plan.

Of the broad Eastern flight of steps only the lowermost—a good deal warped at its North end—has been preserved to what appears to have been its original breadth of 10 metres. The second and third reach nearly to the same extent. But from this point,—forming a roughly diagonal line,—the steps throughout the whole of the North-East section were either hopelessly disintegrated or had been entirely denuded away. Thus as the steps ascend their extent was found to be a continually diminishing quantity till of the topmost only a small piece was left at its Southern end.

Nor was the cause of this destruction far to seek. It obviously lay in the fact that originally, as it does now, the ground here sloped away in a Northerly direction. The result of this was that, while a part of the Southern section of the steps practically rested on the solid ground, an artificial bed, held up by a supporting wall on the North, had to be made for the construction of the remaining section. In process of time this made earth sank, the supporting wall gave way, and the stone slabs of which the steps were composed were either carried away or disintegrated by the natural process of denudation, while others sank below their original level. It was found that the present surface level at the point where the uppermost tier had originally rested at its Northern extremity was a metre and a half below the level of the remaining fragment of its Southern end.

Happily the evidence as to the original extension Northwards of the

[1] This is not adequately brought out in the plan, *Mon. Ant.* xii. Tav. II.

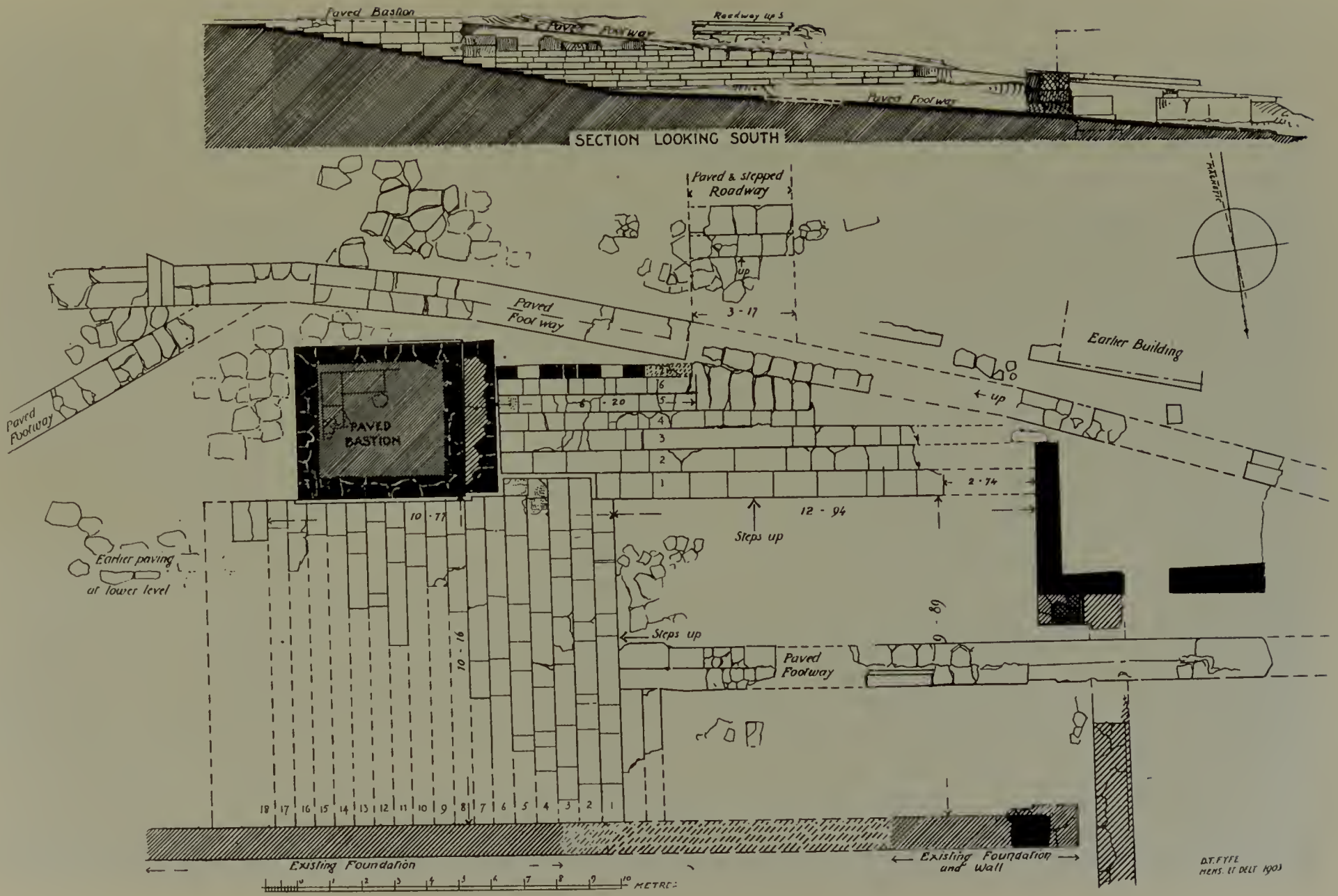


FIG. 68.—PLAN OF STEPPED THEATRAL AREA.

Eastern flight was of the most satisfactory nature. The extent preserved of the lowermost step was in fact found to correspond with a line of wall of which the foundation courses were visible for a considerable extent, answering to the original supporting wall on the North. From this it appeared that the distance of 10 metres for which the lowermost step was preserved really answered to its original extent and gave the width of the whole flight. A continuation moreover of the lower courses of the supporting wall was found running Westward and forming the original boundary of the paved area on that side.[1] It ran exactly where theoretically it should have been looked for, parallel to the paved path that traverses this area from West to East, and at a distance to the North of it equal to that which on the other side separates this path from the Southern flight of steps. The symmetry of the whole construction thus thoroughly asserts itself and the paved path from the West is seen to run to the very centre of the Eastern flight of steps.

In the circumstances I did not hesitate to secure the remains of this unique monument of the Minôan world from further collapse and disintegration by undertaking the considerable task of rebuilding the North supporting wall to what was probably its original height and by restoring the missing slabs of the North-East section of the Southern flight of steps. Several of the sunken slabs were also partially raised and the remaining parts were carefully preserved in their original context. The result as will be seen from Fig. 69 has been to a considerable extent to reproduce what may have been the original effect of this part of the building.[2]

The eighteen steps of the Southern flight, as originally constituted, occupied a rectangle 10 metres broad by 11·40 deep. The depth of the steps varies. In the first eleven steps it is 67 centimetres, but from the twelfth step onwards it is reduced to 57, the tread of the steps being correspondingly lowered from .12 centimetres to 10. That these steps were not simply the approach to some large *Megaron* is shown not only by the absence, beyond, of any remains of such, but by the fact that the branch line of paved path which starts from the other near the South-East corner of the bastion, proceeding in the direction of the North Pillar Hall,

[1] The Eastern section of the part preserved of this supporting wall is 6 metres in length; there is then a gap of about 10 metres, after which from a point under the fourth step it is continued for another 13 metres.

[2] The restored parts are indicated by dotted lines in Mr. Fyfe's plan (Fig. 68).

FIG. 69.—STEPPED THEATRAL AREA, FROM NORTH-WEST.

would, at the distance of between eight and nine metres from the top step, have cut off the corner of any such hall. The most that can have existed must have been a paved platform analogous to that above the long steps at Phaestos, backed perhaps by a shallow *Stoa*. That some such platform existed is indeed rendered probable by the fact that the lower courses of the North supporting wall are continued about four metres to the East of the edge of the topmost step. The upper face of this step together with the presumptive platform on which it abuts is on a level with the stone paving on the top of the bastion. It is remarkable that there exist remains of an earlier pavement (see plan) about a metre below the level of the top step, and with a slope towards the West, which seems to have run beneath the Southern section of the uppermost tiers of this flight.

The clearing of the rectangular area enclosed by the East and South flights of steps and the continuation of the North supporting wall was a work of extraordinary difficulty. It has been a remarkable phenomenon that throughout the whole area of the Palace hardly any remains were brought to light later than at most the decadent 'Mycenaean' Period. It was only beyond the Northern Entrance passage and the North-West Palace angle that appreciable traces of more recent occupation began to appear. In this region occurred a little 'geometrical' pottery and some Hellenic and Roman remains. The most solid record however of later settlement yet encountered was in this theatral area where, in some places at a depth of only 20 centimetres below the surface, a huge flooring of Roman cement was struck, 65 centimetres in thickness and intruding on the area to be excavated to the extent of some sixty square metres. It could only be removed by a long process of blasting, and the existence of this pavement as well as of substructions in connexion with it accounted for the total disappearance of a section of the North supporting wall. It may also explain the fact that no remains of a West enclosing wall were found in the North section of the area, answering to that which seems to have shut in the South section on this side.[1]

As to the original dimensions of this area there can however be little doubt. It formed a rectangle about 10 metres from North to South, by 13 from East to West. It was, as already noticed, divided into two equal sections by a central paved path running to the middle of the lowermost

[1] Traces of an earlier wall line were found (as shown in the plan) a little West of this, which was cut through when the paved path was made.

step of the East flight. This path was 1·50 metre wide at its East end, slightly diminishing (to 1·30) in width in its Westward course, which could be traced for 20 metres. It is evident that further on it joined the other paved causeway that runs West from above the South steps.

At the point where this raised pathway reaches the lowest step of the Eastern flight a section of another similar path with good paving follows the step Northwards. It may originally have communicated with a small passage way going out of the area in this direction, but all traces of such a pathway running further North have disappeared.

The enclosed area itself on either side of the central path shows remains of rough paving and there can be little doubt that in this as in other similar cases this paving was covered with coloured cement or hard plaster. The whole area at present slopes considerably to the North-West and there may have been a slight original incline that way, partly for purposes of drainage. It is probable however that the fall is now a good deal greater owing to the subsidence of made earth on that side. The walls that seem originally to have shut in this area on the West must have been of considerable height in order to secure protection from the sun.

An examination of the deposit immediately beneath an intact part of the pavement, near the centre of the area, established the fact that it contained sherds belonging to the period of the earlier Palace. Both this fact and the occurrence on blocks of the bastion of signs of a type usual in the earlier constructions of the Later Palace are in themselves distinct indications that this Stepped Area dates from the same time as these latter.

But the evidence goes much further than this. This Stepped Area is in fact an integral part of the Later Palace system. It is brought into direct connexion with the two main entrances of the building by lines of paved way. That leading Westward from the Northern Entrance with the tributary line from the Pillar House has been already mentioned. But the principal avenue of approach was the broader causeway, running directly South from the centre of the Southern flight of steps, which was evidently the main entrance of this Theatral Area. This paved causeway, which just by the entrance is crossed diagonally by the other, is 3·75 metres in width and ascends the rise immediately to the South, partly by means of low steps, of which two are preserved.[1] Its further progress is broken off above the upper of these, but its direct course would have taken it above the large foundation

[1] The lower of these is ·74 centimetres deep, the other ·85; the tread is ·12 centimetres.

boulders of the North-West Palace angle and so to the West Court. Here the traces again become clear, but in place of the single broad causeway there are now two narrower branches. One of these leads diagonally across the West Court in a South-West direction. But the other, which represents the unbroken prolongation of the original line, goes straight to the Western Palace Portico. In other words this approach to the Stepped Area is a direct line of access from the State Entrance of the Palace. Practically the 'Corridor of the Procession' is itself a continuation of this causeway.

Thus, including the paved pathway from the West, this Stepped Area was the converging point of five different causeways, bringing it into intimate relation with the most important points of the Palace and its surroundings. But, as has been shown, it was itself in no sense a thoroughfare. The Southern flight of steps on the East side of the entrance passage is actually backed by a barrier and was probably blocked in the same way also in its Western section, though the evidence is there deficient. We have already seen that the Eastern flight could in no case have been the approach to anything more than a comparatively narrow platform. So little is it an approach that the causeway leading to the Northern entrance from the West is somewhat diverted from its course and passes outside the Stepped Area, while its branch leading towards the Pillar House is still more deflected from a straight Western course.

It follows that the Stepped Area itself fulfilled an isolated and independent function in connexion with the Palace. Its low gradations were not steps up towards some outside object but were tiers to supply sitting or possibly standing room for spectators or hearers. The paved area was devised for show or ceremony. We have here in fact a primitive Theatre, and the direct relation into which it was brought with the state entrance of the Palace lends weight to the suggestion that the central bastion supported the canopy of a 'Royal Box.' Including the 'Gallery' or platform above the Southern flight there may have been accommodation in this Minôan Court Theatre for between four and five hundred spectators.

The Palace of Phaestos to a certain extent supplies a parallel. In that case, facing the original West Court, rises a broad flight of nine steps approached diagonally by a causeway, (one of two converging lines), in connexion with an early West Portico. The steps in this case are surmounted by a long paved platform, originally backed by a massive wall

supporting an upper terrace.[1] Backed as they were in this way, the steps could not have been an approach to any hall beyond, and, as was justly observed by the Italian explorers, they no doubt served as seats for numerous spectators, who could thence look on at sports or religious functions in the area below.[2] The long steps of Phaestos, indeed, together with the causeway and the area in front of them, seem to be of somewhat earlier date than the Theatral Area of Knossos. A good deal of the pottery found immediately above the surface of the Court, in fact, goes well back into the early part of the 'Middle Minôan Age' and throws back the date of these constructions to a period covered by the Earlier Palace at Knossos.[3] The steps themselves are higher, the causeways more massive, and the whole has no direct relation to the steps leading to the great Upper Megaron and neighbouring flight ascending North which belong to a later date.[4] What we see at Phaestos is simpler and more rudimentary, as befits an earlier age. The Stepped Area on the other hand, now brought to light at Knossos, shows a greater systematisation. It is already a specialised form of building devoted to a definite purpose. A suggestion, doubtless taken from the great stairs and stepped approaches of the Minôan Palaces, has here developed into a structure which itself is no kind of approach, but the earliest existing example of a veritable theatre.

It must at the same time be observed that it was constructed on quite different lines from the Greek Theatre, just as its orientation is also reversed. The orchestra is here square, and there is no evidence either of stage or *θυμέλη*, unless, indeed, the central bastion served as the base for such an altar. The *θέατρον* proper fills two sides of a rectangle. It is indeed remarkable that, in an age which produced such admirable round buildings of stone as some of the great *tholos* tombs, the idea of circular construction should never have been reached for a purpose like the present.

[1] Remains of the original 'Middle Minôan' wall have been lately found behind a wall belonging to the later Period of the Phaestian Palace, now restored by the Italian Mission (L. Pernier, *Lavori eseguiti nel Palazzo di Phaestos*: Marzo-Luglio, 1903.)

[2] Luigi Pernier, 'Scavi della Missione Italiana a Phaestos' (*Mon. Ant.* xii., 1902, pp. 33, 34).

[3] As noticed above, p. 21, note, the later Palace at Knossos itself probably goes back to the close of the Middle Minôan Period. But many fragments of polychrome pottery found above the level of the West court at Phaestos and in the neighbouring house (the so-called 'Altar')—such as some of those imitating metal work and others with plain geometrical designs—correspond with wares actually found below the early floor levels of the later Palace at Knossos.

[4] One feature of the Phaestian arrangement not observable in the Theatral Area at Knossos is the continuation of the causeway in a line of steps ascending the long stone seats in the manner of a *diazoma*.

The only example of round masonry in the Palace itself is afforded by the great blocks [1] forming the corner of the passage way outside the Antichamber to the Throne Room.

What performances, it may be asked, are likely to have been given in the paved area? The favourite Minôan sport is ruled out, since the enclosure was in no wise adapted for a bull ring. Shows of pugilists, on the other hand, of which we have both at Knossos and at Hagia Triada several illustrations on steatite reliefs and the impressions of seals [2] may well have taken place here. In spite of its rectangular shape, when more level than at present and coated with cement, the area would have been also well adapted for dances, possibly of a ceremonial kind like those of the original Theatre in classical Greece.

Of the performance of religious dances in connexion with the great Minôan Goddess several records have come to light. On the 'Royal Signet,' of which the forged clay matrix was found,[3] a female figure is seen on a terrace of masonry, before the Seated Goddess and her attendant, engaged in an orgiastic dance, and in glyptic scenes one person often stands for many. So too a single figure of a dancing girl appears on one of the Vapheio Gems,[4] while on a seal-impression from Hagia Triada the Goddess herself appears to be dancing between two votaries each of whom holds above her a Double Axe.[5] Still fuller evidence however is afforded by the remains of the Miniature Frescoes found in the neighbouring North West Palace Quarter. Among the scenes depicted on these fragments, the central design of which seems to have been the Pillar Shrine of the Goddess, a group of brilliantly attired women are seen in two rows, executing an animated dance in what looks like a walled enclosure, thronged with male spectators.

But, as has already been pointed out,[6] the great Goddess of the spot —in many of her aspects a Lady of the Dove—was, on one side at least of her mythical being, perpetuated in the Greek Aphroditê. And it is important to remember that to this Goddess in Crete was attached the

[1] Recent investigations point to the fact that the wall above these may have enclosed a rounded bit of staircase.

[2] See above, p. 57.

[3] See *Report*, &c., 1902.

[4] Ἐφ. Ἀρχ., 1889, Pl. X 12.

[5] Halbherr, *Resti*, &c., *scoperti ad Haghia Triada* (*Mon. Ant.*, vol. xiii., Roma, 1903), p. 39, Fig. 33. The heads of the double axes are visible on a more recently discovered impression from the same seal.

[6] See above, p. 87.

native dialectic epithet of 'the Exceeding Holy One'—Ariadnê[1]—under which she has become the heroine of separate romance.

We see then here a theatral building—a central point of interest, as the converging lines of causeway show, of the whole Palace and its surroundings,—containing what seems to have been an orchestra. On the other hand we possess independent evidence of ceremonial dances in honour of the great native Goddess of whom Aphroditê Ariadnê is a later transformation. In view of these facts it is difficult to refuse the conclusion that this first of theatres, the Stepped Area with its dancing ground, supplies a material foundation for the Homeric tradition of the famous 'choros':

οἷόν ποτ' ἐνὶ Κνωσῷ εὐρείῃ
Δαίδαλος ἤσκησεν καλλιπλοκάμῳ Ἀριάδνῃ.[2]

It is symptomatic of the increased importance attached to male divinities in the later religion of Greece that 'choros' and theatre should pass from the Goddess to the God. In the more recent cult the 'choros' of Ariadnê is superseded by that of her Consort Dionysos.

Of the painted stucco,—perhaps the most striking feature of the Daedalean art,—that would have decorated the background and canopy of this Theatral Area, only small fragments were recovered, owing to the great amount of surface denudation. The surface of the *orchestra* itself, once probably coated with hard plaster displaying the brilliant red and white decoration of the Knossian pavements, is now comparatively rough and uneven. But, as has been shown above, the shell of the whole monument remains; the area itself, the stepped tiers for the spectators, the central bastion, an indication of a gallery behind. The annual visit of Dr. Dörpfeld and his party on the 'Inselreise' seemed moreover a fitting occasion for once more trying the capabilities of the ancient *orchestra* before an appreciative 'house.' A dance of our Cretan workmen and their womanfolk was accordingly here organised—a dance, may be, as ancient in its origin as the building in which it took place. This was the πηδικτὸς χορὸς, so called from the saltations performed by its leaders; and, alternating with it, the quieter σιγανὸς,—both forms being prevalent throughout Central and Eastern Crete.[3] The sinuous, maeander-

[1] The close connexion of the great Knossian Goddess with Ariadnê, as to which I had been independently impressed, has been rightly insisted on by F. Noack, *Homerische Paläste*, p. 86 *seqq.*

[2] *Il.* xviii. 591 *seqq.* [3] West of Ida the πεντοζάλης prevails and in Sphakia the σούστα.

ing course of the dancers, as they were led hand in hand by the chief performers in each set, was curiously appropriate to the ancient traditions of the spot. Of such a kind, we are told,[1] was the *geranos* dance, mimicking the mazy turns of the Labyrinth, by Theseus instituted at Delos before the image of Aphroditê 'that he had received from Ariadnê,' and which was in fact Ariadnê herself in her cult aspect.

§ 18.—THE NORTH-WEST BUILDING.

Already in 1901 there had been brought to light part of a building bordering on the North-East of the West Court, and only about four metres distant from the Western Palace Wall, where the great foundation buttress juts out from it. Except, therefore, for the small interval thus left—through which, as we now know, ran the Causeway leading from the West Entrance to the Theatral Area—this building lay as a block between the West Court and the paved area to the North-West of the Palace.

This 'North-West House,'—as it was called at the time of its first finding,—revealed in its basement cavities remains of earlier walls, belonging in part at least to a different system, together with abundant fragments of the finest polychrome and 'egg-shell' ware of the Middle Minôan Period. On the other hand, above what remains of the upper floor-levels, nothing was found of earlier date than decadent 'Mycenaean' wares belonging to the Period of Partial Occupation. It therefore appeared probable that during the intervening period, which would include the whole duration of the Later Palace, the site had been left bare; and, so far as the three chambers constituting the 'North-West House' are concerned, this conclusion may still, perhaps, be valid.

Trial pits dug at the end of the season of 1902 in the area immediately to the West of this, followed by methodical excavations during the present season, have, however, been conclusive in showing that the later constructions known as the 'North-West House' were built up against the East face of a building, or possibly a conglomeration of buildings, that must have

[1] Plut. *Theseus*, xxi. (on the authority of Dicaearchus) (Θησεὺς) ἀναθεὶς τὸ Ἀφροδίσιον, ὃ παρὰ τῆς Ἀριάδνης ἔλαβεν, ἐχόρευσε μετὰ τῶν ἡϊθέων χορείαν, ἣν ἔτι νῦν ἐπιτελεῖν Δηλίους λέγουσι, μίμημα τῶν ἐν τῷ Λαβυρίνθῳ περιόδων καὶ διεξόδων ἔν τινι ῥυθμῷ παραλλάξεις καὶ ἀνελίξεις ἔχοντι γιγνομένην. The Κερατών altar about which the dance took place has been aptly brought into relation with the 'sacral horns' of the Minôan altars by F. Noack (*Homerische Paläste*, p. 87).

been existent throughout the Later Palace Period. These extremely complex constructions find an as yet indefinite extension Westwards.[1] It thus appears that the Palace throughout its existence was flanked at a distance of about ten metres from the Northern section of its Western Wall, if not nearer, by a block of buildings intervening between its Western Court and the paved area and primitive Theatre to the North.

Such a block of constructions, allowed to persist in immediate contiguity to the Palace walls and wedged in between its Court, was necessarily of the nature of a dependency. But of what kind? Careful as have been the recent explorations in this area, the solution of the problem still presents elements of uncertainty. The whole mass of buildings is a medley of small walled spaces affording none of the architectural clues as to their object and interrelation supplied by the other structures on the Palace site. There are none of the usual stone door-jambs; there are not even door-openings: there are no visible corridors, or light-wells, or windows. There are no stairs, at least belonging to the Palace Period. Only in one single chamber appears a column base. A diagonal wall line crossing part of the centre of the block suggests some kind of division, perhaps of later construction, but, whereas the Minôan houses found in the neighbourhood of the Palace always show some free space, however narrow, around them, it is impossible here to extract any separate entity. The whole is one structural conglomeration.

The question naturally arises—why when the Later Palace was laid out, should such a building as this, standing in immediate contiguity to it and almost blocking the access from one Court to another, have been allowed to persist? That a great remodelling here took place during the later period of the Palace is clear, but it was largely on older lines. The earlier maze of constructions on this area was much pulled about, but they were not, as throughout so large a part of the Western Palace Wing, completely levelled away. One building succeeded another, and the obstructive block was allowed to remain.

It looks as if some religious considerations must have underlain this apparent anomaly. Did the site, perhaps, belong to a local sanctuary?

It is certain that not only the extraordinary fineness of some of the relics found in the cells and small chambers of the building, but other more direct evidence supplied by the finds points to such a conclusion. A

[1] It has been traced uninterruptedly in this direction over 40 metres.

Double Axe of archaic form appears painted on the bottom of a fragmentary vase belonging to the Middle Minôan Period found in one of the lowermost deposits of the building. Pieces of large painted Amphoras of the later 'Palace Style' show more advanced delineations of the same sacred object,[1] and an agate intaglio of the same date, of which the essential part is preserved, presents the fuller religious type of the 'labrys' rising from the bull's head (Fig. 70). This design, though already known,[2] derives peculiar suggestiveness from its occurring thus in a Minôan deposit by the legendary site of the Labyrinth. A pair of miniature 'Horns of Consecration' of bronze plate found in the same 'Late Palace' stratum is also of religious significance.

Fig. 70.—Agate Intaglio (completed) [$\frac{3}{1}$].

The Double Axe, moreover, rising between the Sacral Horns and with a leafy shaft, recalling those of the Hagia Triada cult scene, appears here on vase fragments of the more decadent 'Mycenaean' style derived from a superficial layer of this same deposit. In the example given in Fig. 71, we see it flanked in other compartments by a fish and by a scroll derived from a group of three Triton shells. From the occurrence thus of the same sacred symbol in the upper levels of this building and in a stratum belonging to the Re-occupation Period, it is evident that the religious tradition of the spot was of a very persistent nature.

These repeated references to the prevailing Palace Cult make it reasonable to suppose that the North-West Building if not itself a sanctuary must at least be regarded as a dependency of such. What we have to deal with seems to be a series of small basement chambers belonging to some kind of storehouse in connexion with the Central Palace shrine. Reasons have indeed already been given in a preceding Section (§ 8) for believing that at least a considerable section of the Western Wing of the

[1] Compare the examples given, *Report*, &c., 1901, p. 53, Fig. 15, and by D. Mackenzie, 'The Pottery of Knossos' (*J. H. S.*, xxiii. 1903, p. 204). Dr. Mackenzie rightly insists on the fact that the Double Axe is foreign to the ordinary decorative repertory of the Minôan vase painters, and that its introduction must be due to a special religious motive.

[2] Compare the gold figures from Mycenae, Schliemann, *Mycenae*, p. 218, Nos. 329, 330, and the lentoid gem from the Heraeum at Argos, Schliemann, *Mycenae*, p. 362, No. 541; Furtwängler, *Ant. Gemmen*, Pl. II. 42. The design also occurs on a vase from Old Salamis (see *Myc. Tree and Pillar Cult*, p. 9 *seqq.*).

Palace, extending to the borders of the Western Court, stood in a special relation to an important shrine the face of which overlooked the Central Court. It looks as if the North-West Building had served as a further dependency of this, and it may be noted in corroboration of this view

FIG. 71.—PAINTED VASE FRAGMENT SHOWING DOUBLE AXES (⅔).

that an altar-base stands in close proximity to this building at the North end of the Western Court.

There were throughout the remains of these constructions traces of a regular stratification. In the superficial layer were found vase-fragments of the decadent style characteristic of the period of Partial Occupation.

Below this, at a depth of about 2 metres below the surface, was preserved a certain amount of clay flooring belonging to the latest Palace Period and upon which stood vases such as the Amphoras referred to above. The penultimate Palace Period was represented by a much disturbed deposit, but, at a depth of about a metre below the last mentioned floor-level, there were traces of an earlier clay floor with vases of the finest Middle Minôan style. This was especially the case in the more Westerly chambers where the slope of the ground had diminished the effects of later levelling away. Here too was a pit, going down 6 metres, filled with plain pottery of that period including a number of elegant red-coloured cups. The 'Middle Minôan' remains and floor-levels were immediately superposed on the Neolithic. There was no stratum here of that transitional Early Metal Age type to which the name of 'Early Minôan' has been applied.

Among the ceramic relics here found illustrating the Latest Palace Period are remains of very fine Amphoras in the noble 'Architectonic' style then in vogue. One of these, the whole of which was preserved, though it came to light in a collapsed condition, exhibits an exceptionally fine decorative design in which the suggestion of the Egyptian papyrus can be clearly traced. It is 75·5 centimetres in height, by no means of the largest calibre here represented. Another Amphora shows an octopus, the naturalistic rendering of which offers a strong contrast to the conventional polyps that repeat themselves without end on the pottery of the succeeding age of decadence—the period of Partial Occupation. The naturalistic element of the Latest Palace Style was also illustrated by many examples including a cup wreathed with flowering sprays of olives. Very remarkable in this connexion are the fragmentary remains of a huge thick-walled vessel, the form of which unfortunately cannot be completed. It displays zones decorated with peas or large vetches, a favourite subject with the ceramic artists of this period. Some idea of the beauty of this design may be gained from the completed drawing of a group of these fragments given in Fig. 72.[1]

The magnificent hoard of bronze vessels found in this building, also belonging to the Latest Palace Period, will be described in the succeeding Section. Another find, made in a superficial deposit of a chamber in the

[1] The drawing is by Mr. Halvor Bagge. The use of white in the decoration of the original may be noted as a survival of the earlier style.

extreme North-East of these constructions and in the immediate neighbourhood of the Theatral Area, points to a more finished style of interior

FIG. 72.—FRAGMENT OF LARGE PAINTED VESSEL WITH PEA DESIGN.

decoration than is elsewhere traceable in this building. It is a piece of a wall-painting, exhibiting in the foreground a plant which seems at first

sight intended to be of the natural size, while in the background are seen, on a comparatively small scale, the forelegs of a hoofed animal, apparently a bull in the act of galloping. Above are suspended portions of what seem to be locks of human hair, so that the whole probably formed part of a bull-hunting scene like that of the Vapheio Vases. The apparent difference of scale between the plant and the animal provokes the question—is there really to be found here an attempt at perspective? The plant itself in its general growth; the appearance of lanceolate leaves and the ruddy stem merging into green, at once suggests an oleander. But, on looking more closely into the design, it is seen that the apparent veining of the leaves, which

Fig. 73.—Plain Middle Minôan Vessels, North-West Building.

does not in any way correspond with that of the oleander, is really the rendering of small foliage. In other words, according to an Egyptian convention, borrowed in other cases by the Minôan artists, a mass of foliage, though separately delineated, is contained within a single outline the whole interior of which is covered with a green body colour. In this case the lanceolate outline of the branches gives them a misleading appearance of single leaves.

If it is allowable to believe that this piece of wall-painting, out of place apparently where it actually lay, had found its way hither from a back wall of the neighbouring 'Theatre'—the Choros of Ariadnê,—its interest would be greatly enhanced.

A small room, about 1·60 metre square, with a clay flooring, on the West side of the excavated part of the constructions with which we are dealing, contained the most perfect collective group of vases belonging to the

FIG. 74.—MIDDLE MINÔAN PAINTED VASES, NORTH-WEST BUILDING.

Middle Minôan Period yet discovered, including the most elaborately decorative example.

Of the plainer forms here found Fig. 73 *a* shows a pitcher with brown bands and spiral flourishes on the clay surface, the mouth of which is of oval shape. In Fig. 73 *c* we have an imperfect but interesting example of the

peculiarly Minôan type of vessel with irregular vertical streaks of brown glaze on the plain clay surface, which resemble the tricklings down the body of a pot of pitch or glue. This 'streaked' ware, as it may be called, continued through the penultimate Palace Period but the streaks are more sparse in the later examples. In its earlier and more thickly streaked form it is seen on some *pithoi* from the newly discovered Magazines below the Upper Megaron at Phaestos, belonging like the jar before us to the Middle

Fig. 75.—Polychrome Vase (Middle Minôan), North-West Building.

Minôan Period. The Phaestos jars in question are surrounded on their shoulders by six looped handles. It is therefore extremely interesting to notice that among the 'foreign' vessels discovered by Professor Petrie in a proto-dynastic tomb at Abydos[1] is a smaller streaked jar of the same

[1] Now in the Ashmolean Museum at Oxford. The great apparent chronological gap between this and the Middle Minôan types in question has yet to be explained.

general type though with the handles lower down the body and of somewhat more archaic aspect.

Amongst the other vessels are the usual cups (Fig. 74 *e*, *f*) with a black ground and white and vermilion bands. A graceful two-handled vase (*c*) is also shown in Fig. 74, with a white continuous spiral on a dark ground.

A much more magnificent object is a vase with a spout and two handles like the last but of higher build. A back view of this vessel which was found in a practically intact condition is given in Fig. 75.[1] The black and white drawing, indeed, though it shows the design can give but a faint idea of the brilliant effect of the polychrome decoration, in which creamy white, orange and crimson are variously distributed on a lustrous black ground. The front design is the same as the back, and the sides show in each case beneath the handle a graceful fleur-de-lis pattern. Both this and part of the scroll-work on the other faces present a distinct affinity to the decorative motives of some of the finest contemporary signets, at times associated with pictographic inscriptions.

§ 19.—HOARD OF BRONZE VESSELS AND KEFTIAN OFFERTORY SCENE.

About the centre of the area at present exposed of the North-West Building a group of small walled spaces was brought to light. In one of these, not more than 2 metres by 1½ in dimensions, some loose earth fell away in the course of the excavation and disclosed what at first sight appeared to be a set of bronze cups on their sides, ranged one above the other. On further clearing however it turned out that the supposed cups were the handles of a pile of four large bronze basins, while in an upright position beside them, stood a fine single-handled ewer, or *oenochoê*, of the same metal.

The discovery was the more interesting since,—owing no doubt to the careful search for portable treasure at the time of the great catastrophe of the Palace,—no large metal vessels had hitherto been found on the site. The bronze vessels lay at a depth of only about a metre below the surface of the ground, higher that is by the same distance than the usual level of

[1] It is 22 centimetres in height and its body the same in diameter.

the floors of the Later Palace Period, to which, as appears from the characteristic style of decoration, the hoard itself belonged. It is therefore probable that the vases had reached their present position by the sinking of an upper floor level.

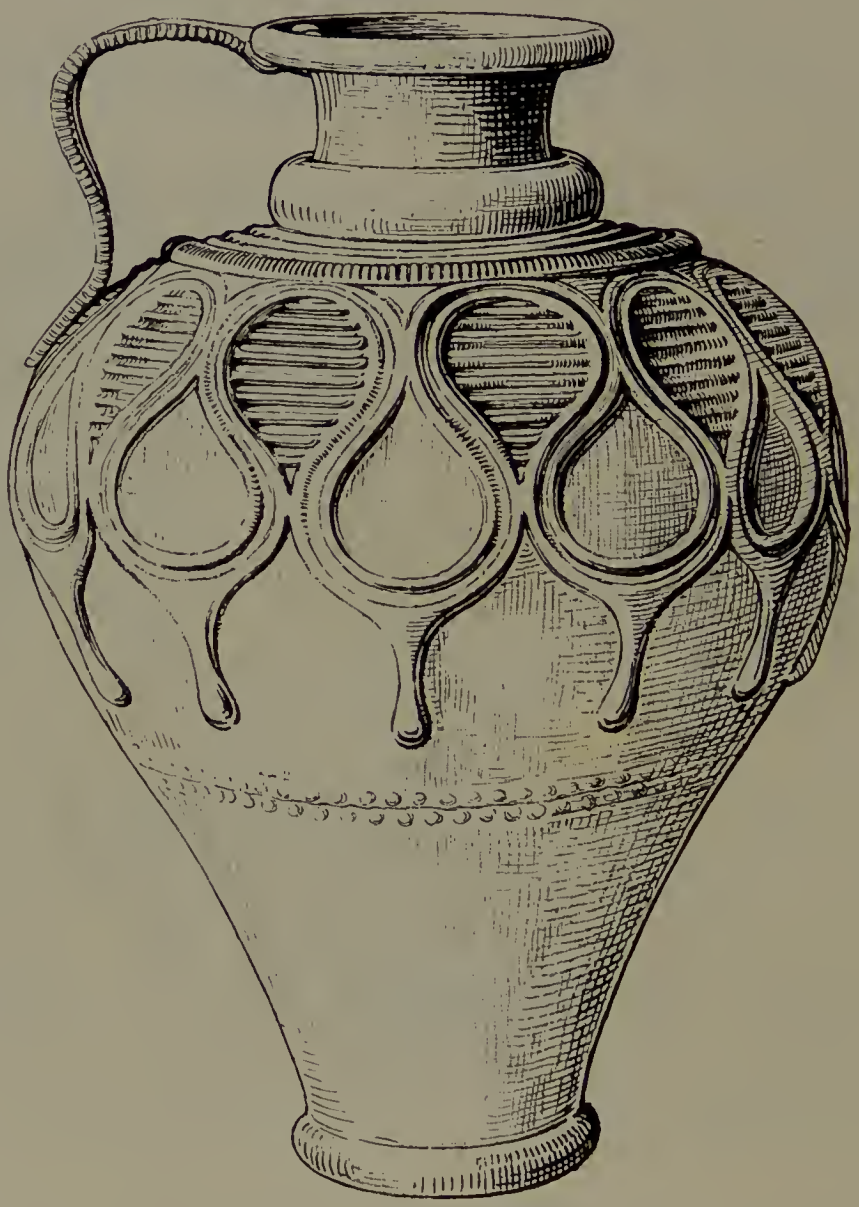


Fig. 76*a*.—Bronze Ewer.

A group showing the ewer, two of the basins, and the detached handle of another, is given in Fig. 77. The ewer, as will be seen, is a good deal crushed, but its original outline is restored in Figs. 76*a* and 76*b*. It is 34·5 centimetres in height and 27 in diameter. The body is formed of two

pieces, joined by a double row of rivets, and the neck is soldered on. The handle is attached by three nails. The alternating curves of the repoussé decoration recall a pattern that also appears on some of the painted vases of the Latest Palace Period.[1]

The magnificent basin which occupies the background of Fig. 77 is the largest of the series, being 39 centimetres in diameter.[2] Its rim is

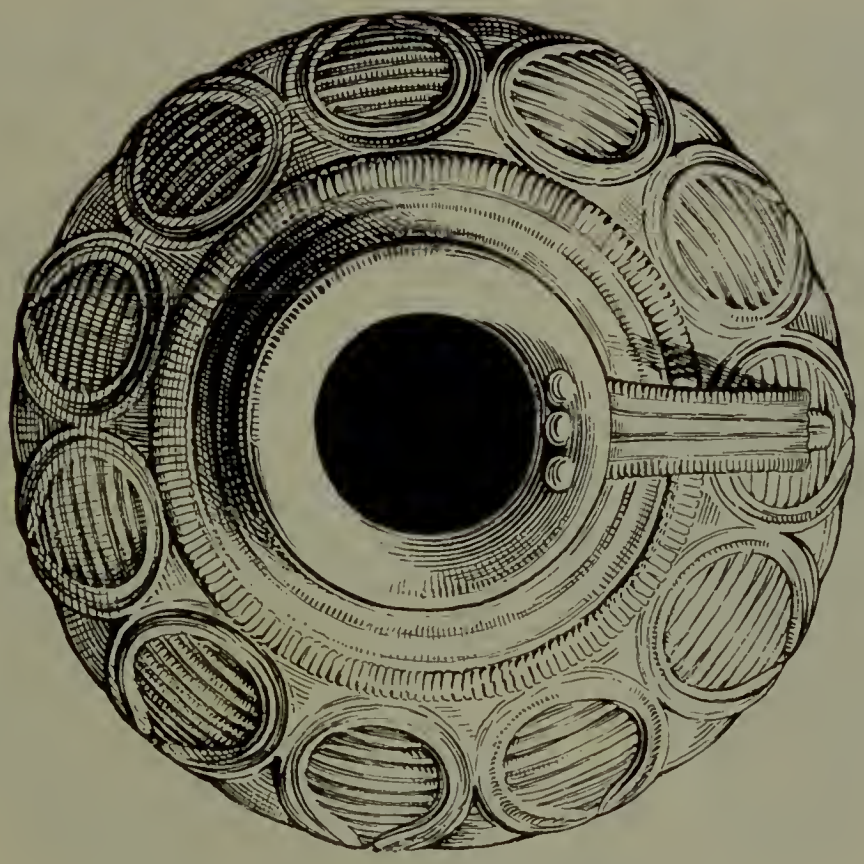


FIG. 76*b*.—BRONZE EWER SEEN FROM ABOVE.

hammered over outwards, the exterior margin being fashioned to represent the rounded end of leaves, and above this is attached, by means of soldering or welding, an upper rim with a beaded and foliated ornament chased in high relief. The whole margin presents the aspect of three bands of decorative foliage superposed on one another. The handle, attached by four rivets, shows a beaded stem from which on either side ramifies the same embossed leaf ornament Fig. 78. It may be observed that this foliate

[1] An example of this form of decoration will be seen in the vase from a Knossian house excavated by Mr. Hogarth, *B.S.A.* vi. (1899-1900), p. 76, Fig. 21.

[2] The height of the basin, apart from the handle, is 8 centimetres.

decoration starting from a central stem is very characteristic of Minôan Art. We see it already in the beautiful Middle Minôan polychrome vase reproduced in Pl. II, Fig. 1, where the design is evidently taken from metal-work, and, in a different technique, it persists as a ceramic ornament to the latest Period of the Palace, being especially characteristic of the large amphoras. A carbonised fragment of a chest found with the 'Chariot

Fig. 77.—Group of Bronze Vessels.

Tablets' shows a carved relief of similar design in wood-work, and the same motive recurs as a frieze on painted plaster.[1] But as a motive of metal technique it seems most at home.[2] On the bronze basin from the present deposit this decoration is carried out with boldness and simplicity combined

[1] An example of this, apparently of 'Middle Minôan' date, was also found at Phaestos (L. Pernier, *Scavi, &c., a Phaestos*, 1900–1901, p. 83, Fig. 22).

[2] A smaller bronze bowl with a border showing a similar design was found in one of the tombs near Phaestos.

with consummate finish, surpassing any examples of the kind that have hitherto come to light either in Minôan Crete or at Mycenae. One exquisite

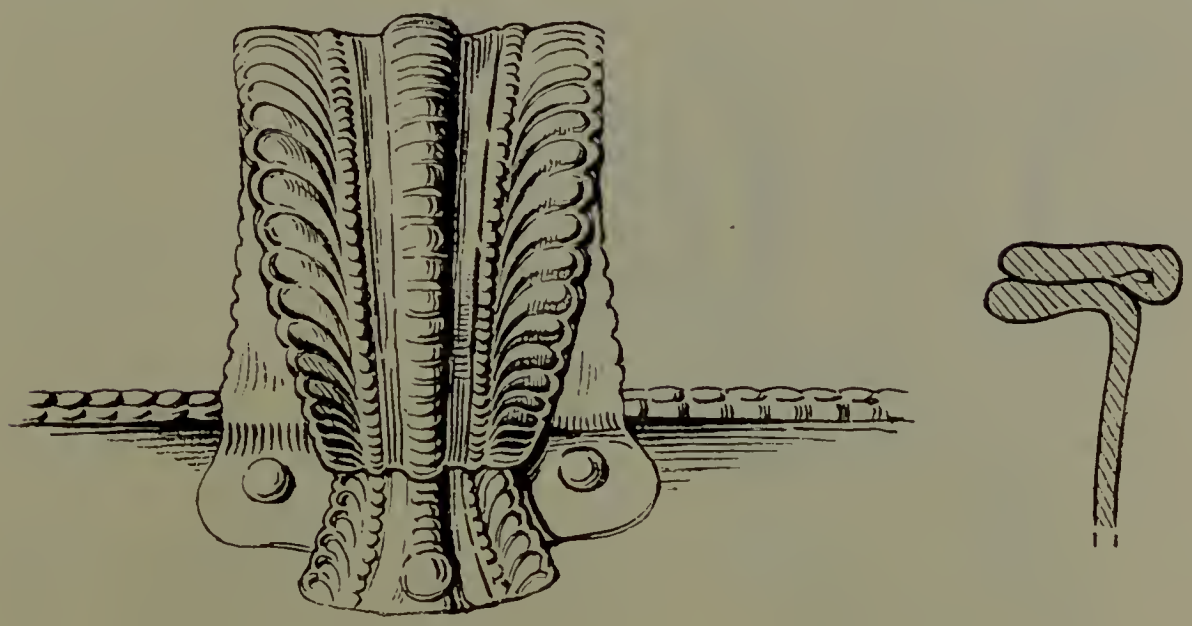


FIG. 78.—HANDLE AND SECTION OF BORDER OF BRONZE BASIN.

touch is the tapering aspect given to the handle, which as it rolls back from the rim of the basin, gradually diminishes in width, like a leaf drawing near to its stem.

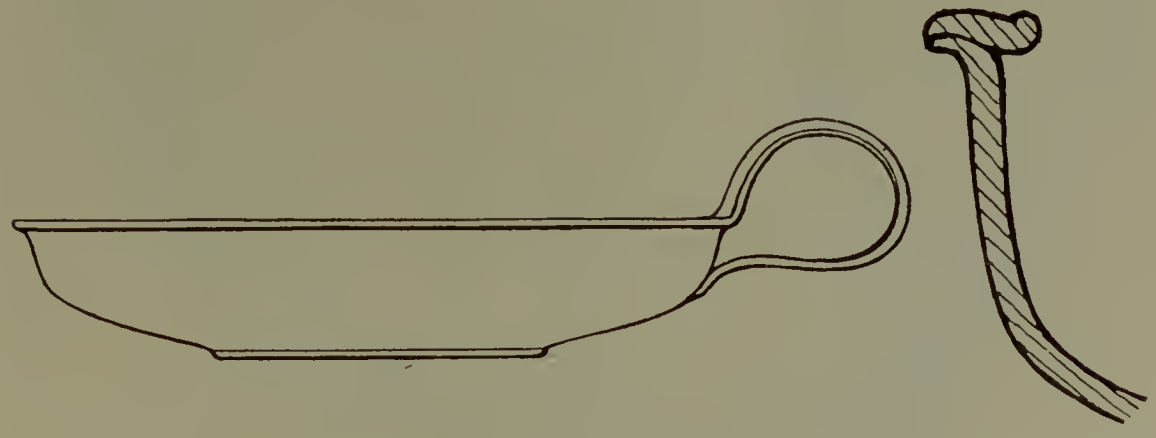


FIG. 79*a*.—SECTION OF BRONZE BASIN.

FIG. 79*b*.—SECTION OF RIM OF BRONZE BASIN.

The smaller basin, which stands in front of the other in Fig. 77, is plain and in this case both the handle and the rim are in one piece with the rest of the vessel. Another larger basin,[1] the section of which is given in

[1] Width of the basin (without the handle) 33 centimetres.

Fig. 79 *a*, shows the same unity as regards the handle, but a decorative border is in this case superimposed in another piece round the rim (Fig. 79 *b*). This was unfortunately much oxidized, but the handle itself presents a beautiful chased design, representing an ivy spray, of which the development will be seen in Fig. 80.

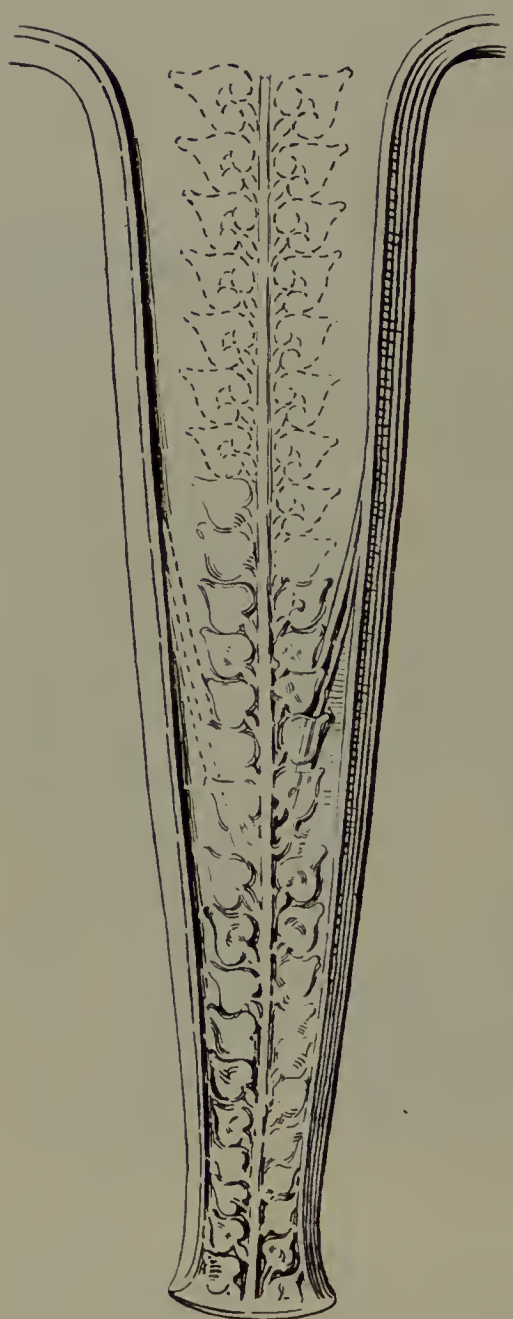


Fig. 80.—Development of Handle of Bronze Basin.

A still more elaborate system of ornament is presented by the basin shown in Figs. 81, 82.[1] Its handle is attached, like the first described, by four rivets, but in this case the richly chased rim is simply the margin of the bowl hammered out and in one piece with it. The decorative design on this, though much oxidised in places, is visible throughout. It consists—as will be better seen from the small section of it given in Fig. 83—of an inner border of finely relieved beading from which at a somewhat oblique angle (like the pendants of a necklace) spring conventional lilies, terminating above in flamboyant sprays that stream behind them in undulating lines, like the flames of so many torches. The handle shows two similar borders divided by a central band adorned with a series of round bead-like bosses in fine relief.

The charm and originality of this design is undoubted, as also its brilliant execution. What, however, is perhaps still more striking is the intuitive knowledge it displays of the principles of balance and distribution of detail controlled by unity, as shown in the treatment of the decorative motive. The boldly relieved beading, which

[1] The width of the basin, without the handle, is 32 centimetres.

forms the inner border and at the same time supplies the links of connexion for the lily chain, finds its more subdued counterpart on the outer margin in the suggestion of continuous bordering given by the flowing lines of the flame-like sprays.

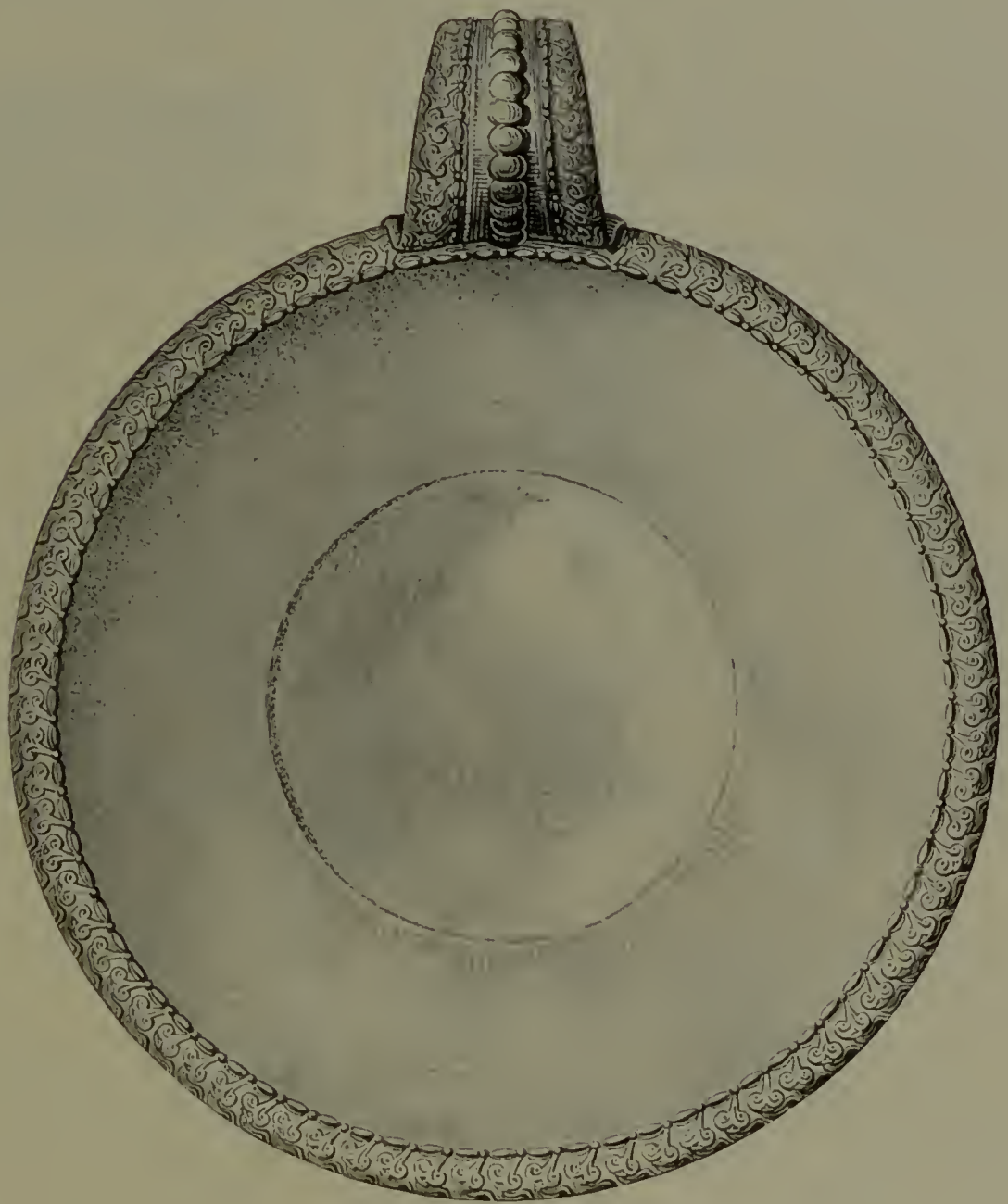


FIG. 81.—BRONZE BASIN WITH LILY BORDER.

The conventional lilies themselves, like the beading, belong to jewellery. They recall, in fact the fleur-de-lis collar of the *gesso duro* relief from the Palace, as well as the lily crown found with it. Gold pendants of similar

form though slightly decadent in style have been found in tombs of the Lower Town at Mycenae.[1] That the lily possessed a special sanctity in the Minôan religion is shown by its appearance on the head of the seated Mother Goddess and in the hand of one of her votaries, on the great

FIG. 82.—SECTION OF BASIN WITH LILY BORDER.

FIG. 83.—SECTION OF RIM OF BRONZE BASIN (½).

signet from Mycenae, as well as by its association with the Priest-Kings of Knossos.

It is a noteworthy fact that on the remaining part of a clay inventory from the 'Room of the Chariot Tablets,' undoubtedly referring to the Royal Treasures, an ewer of the same general outline as Fig. 82 is seen

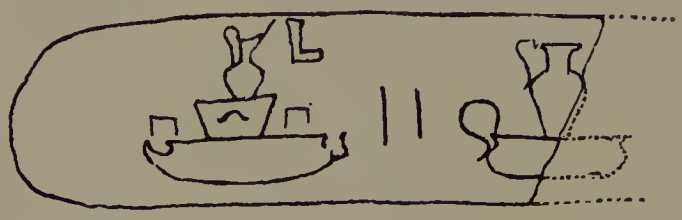


FIG. 84.—PART OF INSCRIBED CLAY TABLET.

placed in a basin with a rounded handle presenting the characteristic contour of those of the present hoard (Fig. 84).

An ewer, or *oenochoê*, of the same type as Fig. 76, with the characteristic raised ring round the base of the neck, appears amongst the offerings of the Keftian Chiefs on the tomb of Sen-mut[2] at Thebes, together with vases of the Vapheio type, of which we also find a record on the clay inventories of Knossos. In the magnificent group of bronze vessels before us we now see for the first time *in situ*, and in what may be legitimately

[1] Good examples of these are in the Ashmolean Museum. For a bone pendant of a similar kind from a room near the Men's Megaron at Mycenae see Tsuntas, Ἐφ. Ἀρχ. Pl. XIII. 15.

[2] This vase is illustrated by Mr. H. R. Hall in his article 'Keftiu and the Peoples of the Sea,' *B.S.A.* 1902–1903, p. 173, Fig. 7.

regarded as the chief centre of their fabric and diffusion, the originals of the vases offered by the chiefs of the 'Isles of the Sea' to the officers of

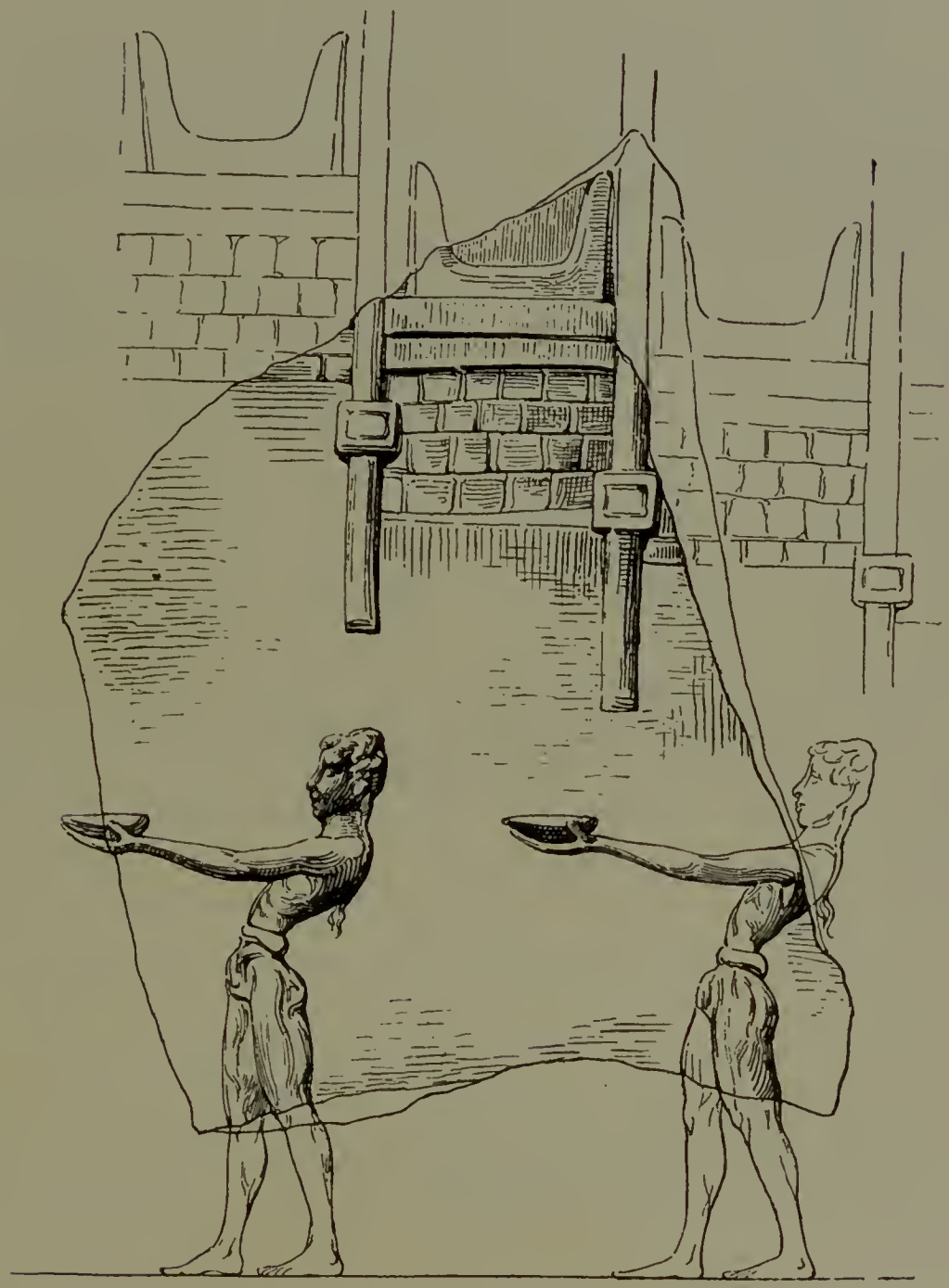


FIG. 85.—PART OF STEATITE VESSEL WITH RELIEF SHOWING OFFERTORY SCENE (ENLARGED).

Queen Hatshepsut and of Thothmes III, in the first half of the Sixteenth Century B.C. The extraordinary artistic skill of the Minôan metal

workers—of which perhaps we find a later echo in the fabled craft of the Idaean Dactyls—sufficiently explains the value set on such offerings by contemporary Pharaohs.

An analogy has already been pointed out between the cup-bearer and the vase-holding youths of the Procession Fresco and the tribute-bearing Kefts of the Theban tomb paintings. A part of a steatite vessel presenting a small relief was found this year during the work of road-making on the further side of the stream, immediately South of the Palace, which supplies a new and interesting parallel.

As will be seen from Fig. 85 the subject consists of two youths—part, no doubt, of a larger procession,—walking to the left in front of a building, each of whom holds out a bowl in his left hand. The parts of the figures preserved display the sinewy build so characteristic of Minôan art. Long tresses of hair hang down below their shoulders, and they wear a simple loin cloth and girdle. The building behind is constructed partly of isodomic masonry and partly, it may be inferred, of wood. Among the wooden constructions are posts with the curious rectangular imposts or capitals already referred to above,[1] which recur in the case of some buildings seen in the miniature frescoes. The posts are continued upwards, and, between them, resting on a ledge in two horizontal pieces, are the Sacral Horns. This feature which was probably repeated, as shown in the restored drawing in the adjoining sections, seems to imply a religious intention in the offertory scene below.

§ 20.—The Royal Villa and Primitive 'Basilica.'

Immediately beneath the Palace site to the East and skirting the edge of the river-flat, shaded here with secular olive trees, figs, and mulberries, is a steep bank, terraced about the middle of its slope by the mule path running North to the village of Makryteichos. Here, at a point about 120 metres East of the Northern Entrance of the Palace, four gypsum door-jambs had been observed in 1902, partly projecting from the foot of the declivity. The further investigation of these had however been, perforce, postponed.

[1] See above, p. 56, Fig. 35 and p. 57.

[2] According to the analogy of the remains found in the Palace the upper part here would be a gypsum slab and the lower a wooden beam.

On now clearing these jambs, we also uncovered remains of their gypsum lintels, and the full evidence was brought to light of three doorways of Minôan character, opening Westwards into some chamber covered by the steep bank, and which had been themselves controlled from that side.

The somewhat serious nature of an excavation in this direction was obvious. It involved not only the diversion of the roadway but a cutting into the declivity to the height of some seven or eight metres. In order therefore to gain some preliminary assurance as to the value of the remains with which we had to deal, it was decided first to tunnel in at the foot of the steep where the door-jambs had made their appearance.

By a happy chance the starting-point chosen for this subterranean exploration — namely the Northernmost door opening — proved to be the best that could possibly have been chosen had we had the full plan of the constructions before us. A wall of solid limestone masonry at once appeared on the right, which afforded good support for the tunnel on that side, and, at three metres' distance, there started a second wall line parallel with the first and separated from it by an interval of a metre.

We had in fact exactly struck the line of a corridor, (A 1 in plan), paved below with good gypsum slabs. At every step inwards the preservation of the walls improved, and that on the right was found to be cased with the remains of gypsum slabs. At 5·70 metres from the opening of the tunnel a double door opening with the usual gypsum jambs appeared in the North Wall, and presently a small closet on the opposite side. At about 9·80 metres from the starting-point the further course of the corridor was cut short by a back wall of fine gypsum blocks and the lower steps of a staircase became visible, running up to the left.

The tunnel was now excavated upwards in this Southerly direction and ten steps of the staircase, consisting of gypsum slabs, were laid bare, leading to what was evidently a landing. Moreover, various fragments of painted pottery, dating from the latest Palace Period, brought out in the course of the tunneling gave a chronological *terminus ad quem* to the habitation of this part of the building.

The results attained by this preliminary exploration were already sufficient to show that we had here to deal with an important construction which in fabric and material, notably in its fine gypsum masonry, rivalled

or even excelled the best preserved part of the Palace. Notwithstanding the labour and expense involved, and other attendant difficulties, it had clearly become necessary to excavate the whole area from above. A considerable cutting was accordingly made in the side of the steep, the three faces of which had eventually to be built up behind the ancient building with solid masonry, somewhat battered, rising to a height in some places of over eight metres. Along the upper level of this, moreover, a new course had to be made for the diverted roadway, which was further protected by a parapet on the side towards the stone escarpment.

The result of the complete excavation from above was to lay bare the walls and chambers of the building, the plans and elevation of which are shown in Pl. I. and Fig. 91. It is unquestionably by far the finest specimen of Minôan domestic architecture that has yet come to light.

In certain fundamental features connected with its construction and arrangement this house shows a decided parallelism with the Domestic Quarter of the Palace and the South-East House described above.[1] Here, too, as in these other cases the main entrance seems to have been by means of a staircase from an upper terrace level. Here, too, the lower part of the building itself is constructed in a rectangular cutting in the natural rock forming the side of the hill—in this case soft decayed limestone, known as *kouskouras*, and conglomerate. Here, too, moreover, the compact support thus given to the lower walls on three sides has had a favourable influence on the preservation of the fabric. As the walls approach the side of the hill more and more of them is preserved and those against the rock reach a height of 3·60 metres.

Here, as in the case of the Domestic Quarter, it has thus been possible to gain an almost complete idea of the construction of an upper storey.

The fact that access from the lower corridor (A 1) already described to the rooms beyond it to the East was controlled from within the corridor may itself be regarded as an indication that at any rate the main entrance to the house was not from the river-flat to the East. Direct access from the Palace was that which all *a priori* considerations would lead us to suppose was the principal aim of its occupant, and that could be obtained in the most expeditious manner by an entrance at an upper level on the

[1] See especially p. 4.

West or hill side. The paved causeway already described as leading towards the Northern Pillar Hall from the Theatral Area, if prolonged beyond that point, might have reached the terrace above the lower section of the present building. The best indication of the level of this original upper entrance can be gained, however, by following upwards the course of the staircase which had first been reached by means of the tunnelling.

Of the ten steps of this flight, all are of limestone except the topmost which is of gypsum. They are 85 centimetres wide,—about half the width of those of the Quadruple Staircase in its lowest flight,—with a depth of 35 centimetres and a tread of 15. The gypsum wall to the right[1] is one of the finest pieces of masonry yet brought to light in Knossos and is preserved to a height of nine courses.[2] A remarkable feature of this wall is the traces along its lower margin of a thin coating of red stucco directly applied to the masonry. This red stucco was also found adhering to the walls of the landing above.

This first flight of stairs leads to a landing of elongated form (3·8 metres East to West by 1·55 metre North to South), its great comparative length being explained by the fact that at this point the stairs branch into two heads. For this reason too there are two landing-blocks, with dowel-holes for wood construction, one on either side of the top of the first flight, instead of a single block of the kind as is usually the case.

An indication of the manner in which the landing and the flights of stairs descending and ascending from it were lighted is supplied by the wall which faces the heads of the stairs on the South side of the landing. This wall shows a low interval in the middle, 2·38 metres wide, flanked by *anta*-like wallings of limestone and gypsum rising to a greater height.[3] Such an opening seems naturally designed for a window. The borders of a window frame fixed in this opening would in fact correspond with the outer lines of the landing-blocks on either side of the descending staircase. That this was the case is further confirmed by the analogy of a similar broad window on a staircase landing of the small Palace excavated by the

[1] The wall to the left was of rougher construction, originally concealed by plaster.

[2] There are two narrow courses at bottom and top (the topmost 20 centimetres high) and seven between, ranging from 57 centimetres in height (the course next to bottom) to 40.

[3] The edges of these are bevelled off and this interval between the stone piers and the woodwork of the window frame must have been filled with plaster.

Italian Mission at Hagia Triada.[1] A window of this width would have served to light the flights to right and left as well as the central staircase.

Of the two heads of this flight, which both run up North, that on the East side had largely collapsed, only the first and the last three steps out of the original nine remaining in their places. The remaining fragments

Fig. 86.—Staircase with two Heads; Royal Villa.

were as far as possible recovered from the débris into which they had subsided and the whole flight restored in its original position.[2] A peculiar

[1] Dr. Mackenzie to whom this observation is due observes: 'the sides of the H. Triada window are so well preserved that it is quite clear that the window was as wide as the stair and the stair *antae* taken together. The window in that case had to light not only the stair but a corridor on either side.'

[2] The dimensions of these steps are the same as the others, except that the tread was slightly higher to make nine steps (including the threshold) correspond with ten in the companion flight to the West.

feature of this staircase is the appearance, where the ordinary eighth step should be, of the jamb and threshold of a small doorway. This doorway led to an upper corridor (A 2), corresponding with that below (A 1), and was controlled from it (see Fig. 86).

The ascending branch of the stairs on the West side of the first flight was, like it, in a practically intact condition, owing to the fact that neither of these,—as was the case with the Eastern branch,—was laid over substructures, but both rested on the solid ground. There were here ten steps as in the lowermost flight and their dimensions were the same.[1] This stairway has to its right the rough back of the fine gypsum wall that follows the lower stairs; the rubble plaster and stucco, which once covered it on this side, having fallen away. The opposite wall on the left or Western side of this ascending flight is of solid construction, mainly of gypsum blocks. Seven courses of this are in part preserved, the uppermost being a kind of flat coping, only 10 centimetres high. In this wall again are traces of what seems to have been another window opening.[2]

The top of this flight emerges, like the other to the East of it, on the end of the Upper Corridor (A 2). The West end of this Corridor also probably communicated with a terrace passage leading to the North wing of the house. What is extremely remarkable about this arrangement is that there seems to be no practical reason for this Upper Corridor to be thus approached by two flights of steps (which are in fact branches of the same staircase), emerging on it within a few feet of one another. It is difficult to avoid the conclusion that this arrangement of a staircase with a double head was adopted by the architect simply with an eye to symmetry and grandiose effect.

There is moreover every reason to believe that this arrangement of a flight of stairs with a double head was again repeated in a storey above this.

To the right of the flight last described, at the point where it reaches the Upper Corridor (A 2), is one of the usual limestone landing-blocks (x in Section Pl. I). On the opposite or Eastern side of this block is visible a triangular ledge such as usually occurs on such landing-blocks[3] for the

[1] Of these steps, Nos. 1, 2, 3 are of gypsum, 4, 5, 6, 7, 8 of limestone, 9 of gypsum and 10 of limestone.

[2] This is Dr. Mackenzie's opinion. The actual interval in the wall here is broader (2·53 metres). The sill seems to have been about 1·30 above the landing floor.

[3] Compare especially the landing-blocks of the fourth flight of the Quadruple Staircase (*Reports*, 1902, p. 103; 1903, pp. 32, 33).

support of the first steps of a stairway when such a stairway runs above a hollow space below.[1] We have here then clear evidence of another flight of stairs ascending South, immediately over the first flight that leads upwards from the ground-floor Corridor. A further trace of its upward course is supplied by a slanting groove cut in a second block (ϒ in Section Pl. I). At a somewhat higher level in the same wall, the continued line of the ascending steps is found to pass immediately over the corner of the flat slab, x in Section, which would have afforded additional support.

This upper Southward flight would thus have reached a rectangular landing corresponding with that below, and half way up to the next storey. That this second storey was itself reached by a double head of stairs running North, and corresponding with those below, seems to be demanded by considerations of symmetry and is best in accord with the structural indications below. Here, however, owing to the denudation caused by the slope of the hill, the direct evidence has been swept away.

The existence of an original cliff-face bordering the narrow terrace ledge reached by the first storey shows that the main line of approach from the Palace must have reached this Villa at a higher level. The analogy of the Quadruple Staircase would lead us to suppose that the chief entrance was at the level of the second storey. From this level a path with a very easy gradient would have brought the Villa into direct connexion with the Northern Palace entrance, the Pillar Hall, or the Theatral area beyond. It is impossible to say for certain whether there was yet another storey above this upper terrace level, giving the house four floors in all; but the analogy of the buildings surrounding the Central Court of the Palace seems to point that way.

In any case there are good grounds for supposing that from the main entrance of the Villa on this upper terrace level two double and two single flights of stairs, making six flights in all, led down to the ground-floor rooms and the principal hall.

The stateliness of this arrangement is self-evident, and some ceramic relics belonging to the upper storey have happily been preserved which show that the house itself was furnished and adorned in a princely style. A little above the floor of the lower landing, at its North-West angle, and

[1] Dr. Mackenzie makes the just observation that these ledges are only cut in landing-blocks where there is such a hollow interval below. Where the steps rested on a solid foundation there was no such necessity. Thus in the present case no ledge has been cut in the opposite or Western side of the same landing-block, since the steps there rested on the solid ground.

FIG. 87*a*.—PAINTED 'STIRRUP-VASE' (FROM ABOVE).

FIG. 87*b*.—PAINTED 'STIRRUP-VASE.'

above the lowermost steps of the staircase thence ascending North, lay the remains of two extraordinarily fine painted vessels,—a stirrup-vase and a tall, handled jar, both in the later Palace Style, that had evidently reached the position in which they were found by falling from an upper level.

The stirrup-vase or 'Bügelkanne,' which it was possible to put completely together is shown in Figs. 87 *a* and *b*. The decoration is laid on in a lustrous orange brown on a paler lustred ground. The upper surface (Fig. 87 *a*) shows four rosettes, a feature taken from the faïence inlays and their painted plaster imitations of the Palace Style. Over the body of the vase is a reticulated pattern and conventionalised flowers with dotted fringe, perhaps representing pistils and stamens. This design is of interest from its recurrence as the decoration of a man's robe on a fresco fragment from the Domestic Quarter of the Palace.[1]

Thus both the architectonic feature supplied by the rosettes and the choice of a design taken from the embroidery of Court attire bring the present vase into the nearest relation with the artistic fashions of the latest period of the Palace. This evidence of contemporaneity has a special archaeological value from the fact that although 'Stirrup-Vases' are figured on one of the clay inventories, hitherto no single example of such a vessel had been brought to light in the Palace itself. Such vessels, indeed, had occurred in sufficient abundance on the site, but always of a decadent style and often exhibiting coarse octopus designs—dating from the subsequent period of Partial Habitation.

On the other hand we know from specimens found at Gournià and Hagia Triada that the form of vessel itself goes back to the age corresponding with the earliest period of the later Palace. Moreover, a rough spouted vase with two handles on each side of an *open* mouth found in the Palace at Knossos in 1901, and which seems to belong to the Middle Minòan Period, affords an indication that the typical Stirrup-Vase itself, with its closed mouth, sprang from an early Cretan prototype.

Still more magnificent was the tall painted jar found with this. Although part of the base and of one side was wanting it was possible to restore these missing fragments with certainty and to build up the whole vase as shown in Fig. 88. It is about 1·20 metre in height and repre-

[1] *Report*, &c., 1902: Fyfe, 'Painted Plaster Decoration of Knossos,' *Journ. R.I.B.A.*, 1902, p. 128, Fig. 69. (The figure has been placed there in a reversed position.)

Fig. 88.—Painted Jar with Papyrus Reliefs from Royal Villa.

sents a wholly new style of Late Minôan ceramic technique[1] in which the principal features of the design are rendered in relief. The plant here portrayed, with its triple sprays and buds, is a decorative adaptation of the papyrus. The wavy lines between the stalks may be a reminiscence of the zigzagging double lines indicating water, which in the Nilotic prototypes appear before or beside such clumps. In the intervals between the papyrus heads are raised circles enclosing rosette and aster patterns in relief and the broadest of these circles is itself impressed with similar stellate figures. The rosettes with raised ring borders, of which the largest and best examples appear on the side of the vase not shown in Fig. 88 resemble those depicted in the flat on the upper part of the companion vessel (Fig. 87).

We have here exemplified the most characteristic elements of the late 'Palace Style'—with its conventionalised and often exotic plants and architectonic motives. In this case, however, the reinforcement of colour by relief renders this highly stylised system of ceramic decoration doubly impressive. Certainly no known vase of the later period of the Palace can compare with this in magnificence of effect. It represents indeed the acme of the grand 'Palace Style' which—as we know from the Aegean painted pottery associated with Egyptian remains of the time of Amenhotep III and IV and Queen Tyi at Tell-el-Amarna and elsewhere—was already in complete decadence by the latter half of the fifteenth century B.C. The last days of the present Villa, as of the Palace itself, fall within an earlier time-limit. It will be seen below, however, that a part of the ground floor rooms at its South-East angle were inhabited by later 'squatters' during the period of decadence.

It is obvious that a painted jar of such calibre as the above, with its quasi-architectonic decoration, was well adapted to fill a prominent position in the building. From the situation in which its remains were found it seems likely that it had originally stood together with the 'stirrup-vase' on the second landing of the staircase.

This staircase, as has been shown, like the Quadruple Staircase of the Domestic Quarter of the Palace, was the natural line of access to the lower as well as the upper rooms, the main approach to the principal halls being in both cases from above.

[1] An indication of this style however appears in a pithos of Magazine 9 which shows rosettes painted on slightly convex disks enclosed by raised circles.

The lowest flight of stairs, as already mentioned, debouches on the ground floor Corridor A 1, which passes immediately on the left a small stair closet 2·20 metres deep and ·75 centimetre wide, with a doorway opening inwards, and at its further end a ledge of masonry ·30 centimetre high and ·85 deep. It was formed by the utilisation of the space beneath the upper flight of stairs to the East, and answers to the closet of which the evidence was found beneath the Wooden Stairs of the Domestic Quarter.

The Corridor, A 1, which was apparently lined on both sides with gypsum plaques showing traces of red plaster decoration, after passing the double doorway on the left, communicating as will be seen with the principal Megaron, emerges at its East end on a kind of Hall with seven doorways. The three door-openings to the East of this are those which from the partial uncovering of their jambs led to the discovery of the house itself. They led to a further enclosed space the Eastern boundary line of which has disappeared owing to the slope of the ground, though, as will be shown, its position can be determined with sufficient certainty from other considerations. On this side we may safely assume that there existed one or more door openings leading to the gardens and running waters of this favoured spot.

On its South side the Hall shows two doorways opening into two small chambers separated by a thin partition consisting of gypsum slabs with a clay filling between them. That to the East (F 1) is a mere closet. The small room[1] to the West of this (G 1) had a panelling of similar gypsum slabs on all its walls. Its paving was partly of gypsum, partly of grey schist, and seems to have been originally coated with hard coloured plaster or cement.

The remaining South-West doorway of the Hall leads to a larger room H 1 (3·80 metres by 2·50), the door of which was controlled from within. Its flooring is mostly of plain clay with a strip of gypsum paving 1·25 metre wide along its South wall. Owing to the fact that it is enclosed on the West and South by exceptionally solid walls of gypsum and lime-stone blocks, one supporting the staircase, the other forming part of the outer walling of the house and resting itself against the soft rock, this room seems to have remained practically intact at a time when the greater part of the building must have been in ruins, and it thus offered facilities for

[1] Its dimension are 2 metres East to West, by 1·70 North to South.

later 'squatters.' On its clay floor (itself symptomatic of this age of decline) were found, in fact, a series of 'stirrup-vases' with degraded octopus patterns. In this quarter of the building there were also found numerous fragments of pottery of the same late character (Fig. 92, p. 153) including the upper part of a painted clay 'idol' (Fig. 92 *c*). Others show a somewhat nearer relation to the 'Palace Style,' as if this corner of the building had been re-occupied rather soon after the catastrophe.

The 'Hall of the Seven Doorways' itself (E 1) has every characteristic of a public and passage room. It is, in fact, a kind of expansion of the Corridor. The only doors controlled from it were those leading outwards to the East. The rooms opening South and West had command of the doors leading from the Hall and were private in relation to it. The door from the Corridor was also controlled from that side. The pavement of this small *atrium* shows a square border round a central rectangle, pointing to an original decoration of coloured plaster.

Re-entering the Corridor from this 'Hall of the Seven Doorways' we reach once more the double door-opening already mentioned, which proved to lead to what for many reasons must be regarded as the principal 'Megaron' of the building.

This Megaron is divided into two main sections by a line of four gypsum door-jambs with double reveals, by means of which one section could if necessary be isolated from the other. We have here another example of the elastic disposition of the Minôan halls, such as is illustrated on a larger scale by the Hall of the Double Axes. When the double doors were thrown back they fitted into the jambs and piers so that these became simple pillars admitting free intercourse between one section and the other and making the whole in fact a single hall. When they were closed the sections became two separate rooms, each in this case with a light-well of its own.

That part of the Eastern section of the hall, which immediately borders on the cross-line of door-openings, consisted of a rectangular paved area (4·55 metres North to South by 2·52 East to West) the finely cut gypsum slabs of which however have disappeared in the North and North-East parts of the room.[1] The South Wall of this section of the

[1] Along the South wall of the room runs a strip of gypsum paving 25 centimetres wide, raised slightly above the level of the rest of the pavement.

hall is covered by a lining of gypsum slabs,[1] which in the case of the North Wall[2] have been lost.

The Eastern limit of this sub-section of the hall is formed by a limestone stylobate, the line of which runs a little West of that followed by the door-openings of the smaller hall immediately South of it. Two grey and white column bases, of a stone resembling granite, rise from this stylobate which is cut out so as to collar round them. The stylobate itself terminates in two flat bases in the rubble wall lines on either side, these being grooved out for the reception of gypsum blocks, of which that belonging to the Southern Wall has alone been preserved.[3]

Beyond this portico we should by all analogy expect one of the usual rectangular light areas with cement flooring. Owing to the falling away of the ground the actual wall lines are only traceable for a very short distance beyond the stylobate, but fortunately the existence of a diagonal outer wall belonging to a triangular enclosure immediately North of this sub-section of the hall supplies a satisfactory basis for delimitation on this side. A *terminus ad quem* is given by the point at which this converging wall line would meet that of the Northern Wall of the hall itself if produced. That there was here in fact a rectangular light-well of the usual kind is further shown by the existence, a little East of the stylobate, of the remains of a paved foundation for the cement flooring that characterises such areas,—consisting of small pieces of limestone and gypsum slabs.

Returning now from the portico and light-well to the interior section of the 'Megaron' we notice in the gypsum thresholds of the three door-openings that give access to it distinct traces of the rubbing caused by the opening and shutting of the doors. These are especially visible in the case of the middle doorway, and show that the doors, which were in each case double, opened Westward towards the inner part of the chamber, and were therefore controlled from that side.

On this inner side, again, opens a finely paved rectangular area,—in this case, 4 metres East to West by 4·55 North to South. The gypsum slabs, in places a good deal crushed by the falling in of upper chambers, here show a very neat arrangement. In the centre is a rectangular panel

[1] These slabs do not go down to the level of the pavement but leave an interval of 12 centimetres. Both North and South walls are of rubble construction.

[2] The North Wall was found to rest on a broader foundation wall which projects 20 centimetres beyond the line of its South face..

[3] Its height is 71 centimetres and breadth 47 centimetres.

(1·17 by 0·86 metre) surrounded at a small interval by a nearly square border of slabbing, which in turn is framed, with another small interval between, by a similar border of slabs, following the boundaries of this part of the hall. The intervals between these different sections of pavement contained a hard plaster or cement filling, which had been coloured red. We have here an indication that the whole pavement was varied with successive zones of colouring as in the case of the Throne Room.

The gypsum wainscoting is preserved on the walls of this part of the hall to a height of 1·30 metre. But the most interesting feature of this section is the system of constructions that occupy its Western end.

The square paved area above described was found to be bordered on this side by a double balustrade with three steps ascending between them. Access was thus given to an area of elongated rectangular form, backed by a wall of fine gypsum masonry. But the most remarkable feature was a square niche in the middle of this wall containing the remains of a gypsum chair or throne (see Fig 89, the section in Pl. I.).

The balustrades, as will be seen from Fig. 89, run out from *antae* in the two side walls,[1] and on each side of the steps they show a pilaster-like projection. Their construction is of the kind usual in such cases, with an interval to be filled with woodwork (at present replaced), between the upper and lower slabs. The pilaster-like parts are formed of solid gypsum blocks : the rest of the lower section is constructed of masonry faced with gypsum slabs. The wooden casing was backed by rubble and plaster. The upper parts of the balustrades consisted of flat gypsum slabs, 13·5 centimetres high, near the ends of which, facing the steps, was in each case a raised square base.[2] Of these the Northern base still showed the round mark left by one of the two wooden columns that had stood here on either side. The arrangement here recalls that of the Palace baths and of the Queen's Megaron.

The steps are of gypsum, just wide enough to admit the comfortable passage of a single person.[3] On the second step a tall lamp of lilac gypsum with a finely modelled pedestal[4] stood in position, apparently as it had been left at the time when the Villa was deserted. The part of the gypsum

[1] These are shown restored. They project 20 centimetres from the wall. The length of each balustrade is 1·70 metre ; the breadth 0·70, and the height 0·80.

[2] 34 centimetres square.

[3] They are 62 centimetres broad, 32 deep, and have a tread of 12 centimetres.

[4] The lamp is 52 centimetres high, and its receptacle above is 22 centimetres in diameter.

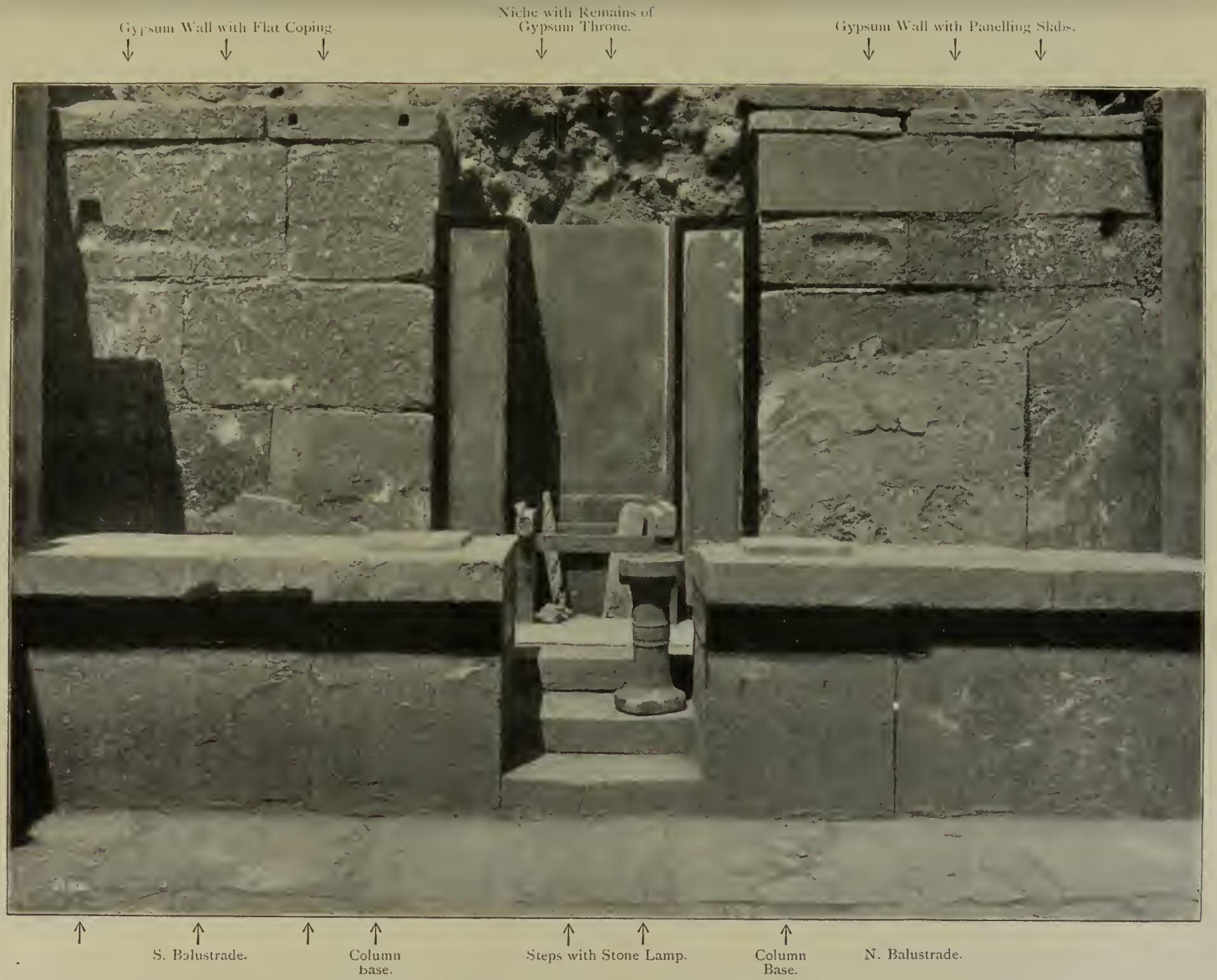


FIG. 89.—WEST END OF BASILICAN HALL SHOWING BALUSTRADE, RAISED PLATFORM, AND NICHE WITH REMAINS OF THRONE.

step covered by its base had been better preserved than the rest of the surface of the step, and in consequence of this stood out from it as a raised disk.

The long narrow platform thus approached which lies between the balustrades and the back wall is paved with good gypsum slabs. It is 4·45 metres long—answering to the width of the rest of the hall—but only 60 centimetres deep, thus affording no more than standing room.

This paved platform is backed by a fine gypsum wall rising on each side of the central niche to a height of 2·15 metres. These walls are built against the cut face of the rock and the uppermost course on either side is a coping of flat slabs. These as well as the rubble walls at each end of the platform were lined with gypsum panels.

The square niche was constructed in an interval[1] in the back wall of this platform. It is 62 centimetres wide and 43 deep, and its slab lining was 1·67 metre high,[2] the back slabs resting against the cut face of the soft sandy rock. Wooden posts with a stucco backing had stood at the outer angles of the niche, and for purposes of conservation this framing has been restored.

The gypsum chair or throne, the remains of which were found in this small square apse was unfortunately too much broken and decomposed to admit of restoration. It was clear however from the dimensions of some of the pieces that it had exactly fitted the niche. The remaining pieces were plain in character and seem to have formed the inner skeleton of the seat the construction of which was probably supplemented by wood work and decorative plaster. From the appearance of a vacant space above, it looks as if the niche itself had been covered by a wooden impost forming a canopy and also probably embellished with painted plaster.

The analogy of similar constructions in the Palace leaves little doubt that the elongated space enclosed by the balustrade and columns on one side and the back wall with the niche on the other was some form of light-well. An interesting feature about the back wall,—the massive gypsum masonry of which is well shown where its panelling of the same material has broken away—is a top course of flat slabs such as are generally associated with parapets in Minôan buildings. It seems in fact as if the

[1] This interval itself is 1·30 metre wide.

[2] It was found necessary to replace the upper parts of these slabs which were in a much decomposed condition. On the South side of the niche only the lower slab was preserved.

wall had here stepped back like that above the Southern light-well of the Queen's Megaron—the Area of the Bird Fresco—to facilitate the incidence of light. Here the steep rise of the rock behind made this device the more necessary.

But, while there can be no reasonable doubt that we have here to do with a light-well, certain differences in construction show that it could not have been one of those—like that to the East of the portico above described,—directly open to the sky above.

The regular rule with regard to such exposed spaces is that the facing of the walls is of limestone, while the area itself has a cement surface and is provided with a drain. In the present case both the masonry and its facing are of gypsum, there are paving slabs of the same material in place of cement, and so far from there being any trace of a drain it is evident that water falling into the area would pour down the steps into the hall below.

We must therefore conclude that the present light area was roofed over at a higher level and received its light by means of a clerestory looking West. The room above the Megaron must naturally have been lit by the same covered opening.[1]

We have here then a long hall, 4·55 metres in width and with a total length of 11·50 metres,[2] divided into four component parts—the raised light area with its niche, the paved space within the door openings, that contained within the portico beyond, and the originally cement-coated light-well following on to it to the East. And when we come to consider the completed plan in connexion with its most striking features,—the raised dais flanked by the balustrades and pillars and the throne in the square niche behind, commanding the whole length of the hall—it is impossible not to be struck with the parallel thus presented to the later *Basilica*.

Naturally the comparison can only be made on general lines, but we have here, overlooking the pillar-hall, a raised *tribunal* with its *cancelli* and *exedra*, in the central niche of which is the seat of honour, answering to the place of the episcopal throne in the early Christian building of the same name. The pillar hall itself contains moreover the elements of a triple division marked by the two columns of the balustrade, the central piers in

[1] The same evidence tends to show that the 'tank' of the Throne Room, and the Northern and South-East bath with their gypsum parapets and facings were lit in a similar manner.

[2] Not including the depth of the niche.

line with them and the two columns bordering the light-well to the East. The clerestory seems to have been confined to its West end.

But this comparison gains an extraordinary interest when we recall the historic origin of the *basilica* itself, Christian and Roman, from the βασιλική or στοὰ βασίλειος, of the Archôn Basileus at Athens, who stood forth as the sacral representative of an earlier King. That the pillar-hall of the Archôn Basileus must eventually be sought in the Megaron of a prehistoric Palace had already been recognised,[1] but at a time when comparisons were, perforce, confined to theoretic re-constructions of Homeric halls by the light of later Greek houses.

The materials for comparison now supplied by this Knossian 'Megaron' are of a very different order. It does not seem indeed an unwarrantable conclusion that we have here actually an example of a type of royal hall such as may have existed in the Cretan Palaces themselves on a more spacious scale. The present Villa must in any case be recognised as a dependency of the Palace, and has itself every claim to be regarded as a Princely abode. The exceptional scale on which it is built, with its successive storeys, distinguishes, it from the other dwelling houses about. In the solidity and stateliness of its construction, with its fine gypsum walls and flights of stone stairs with their double heads, as well as in its magnificent furniture—as evidenced by the jar with papyrus reliefs—it rivals and in some respects excels any part of the Palace itself. Lying as it does almost within a stone's throw of the Northern Entrance, on the cool side of the hill and within easy access to the stream and the gardens watered by it, the house and its surroundings seem naturally marked out as a summer pleasance. We have here a Royal Villa, and it is allowable to believe that the throne within the niche, commanding the whole length of its principal hall, was actually occupied by a King or princely scion of Minôan stock. There has here, in short, been brought to light the true historic analogue of the 'Royal pillar-hall' of later times.

The tendency of such an arrangement to survive would be all the greater if, as seems to result from the great religious element in the Palace finds, we have here to do with rulers who performed priestly as well as religious functions. It was indeed this side of the old Athenian kingship that survived in the later office of the Archôn Basileus.

[1] See especially K. Lange, *Haus und Halle, Studien zur Geschichte des antiken Wohnhauses und der Basilika* (Leipzig, 1885), p. 60 *seqq.*

In this connexion it is interesting to notice that the chamber (see Fig. 90) with which this basilican hall immediately communicates to the North is an extraordinarily fine example of a Pillar Room such as those of the Palace, and which seem to have formed a principal feature of the Minôan domestic sanctuaries.[1]

The doorway leading to this Pillar Room opens in the North Wall of the Megaron just outside that end of the balustrade. The plan of this doorway and threshold is of special interest not only from the door marks but from the presence of a socket for the bolt as well as for each of the hinges.[2] The doors, which were double, opened inwards towards the Pillar Room and were therefore controlled from that side.

The room itself (D 1 in plan) is nearly square,—4·15 metres North to South by 4 metres East to West. The central pillar, composed of two gypsum blocks, is 1·82 metre high and 52 centimetres square. The paved flooring of the room, which is 20 centimetres above the level of that of the neighbouring hall, is of finely cut gypsum slabs. Immediately surrounding the pillar is a square framework of slabs, and another similar bordering follows the walls of the room. Between the inner panel of pavement and this outer border is a square channel, 47 centimetres wide and 6 deep, paved with gypsum slabs like the rest of the floor. In this channel, East and West of the pillar on either side, is a small oblong receptacle.[3] We have here a feature analogous on a smaller scale to the vats in a similar position in the East Pillar Room of the Palace.

Another curious feature of the room is a group of small dowel-holes in the South-East corner of the room, which may have stood in connexion with some fixed article of furniture.[4] As to the original contents or decoration of the rooms there was however no clue. The soil within it had all the appearance of later filling, and there can be little doubt that at some past period this Pillar Room had been methodically overhauled in search of treasure.

[1] See above, p. 9.

[2] The plan is given in Fig. 6, p. 15. See p. 14, No. 1. It is there called 'North door of North-East house.'

[3] That to the West is hollowed out of a single block of gypsum, that to the East has its West side formed of a separate piece. The West 'Vat' is 44 centimetres North to South by 37 East to West and 12 centimetres deep. The East 'Vat' is 46 centimetres North to South by 35 East to West and 16 deep. The latter receptacle had been plugged by a small block.

[4] There is a similar dowel-hole in the North border and another in the South-West corner of the room.

The room itself is of extremely solid construction. It is built of large gypsum blocks with good faces inwards, the other side being left rough or splayed away. This rough side was, however, rendered invisible by a coating of rubble and plaster, and, on the side of the Megaron, in addition to this, by the gypsum wainscoting.

From their solidity of construction the walls of this room are in singularly good preservation (see Fig. 90). Of the East Wall, owing to the slope of the hill, only three courses are preserved, but the South Wall

Fig. 90.—Pillar Room; Royal Villa.

shows five, the North six, and the West Wall seven: both of the two latter rising to a height of 2·43 metres. There is no evidence of any means of lighting this room except through the door.

The topmost course of the North and West Walls presents a most interesting feature. In the North Wall, just opposite the pillar and on a level with its summit, an opening has been left for a large square beam which rested on the pillar and formed the principal support for the roof of the room. At a somewhat higher level than this the blocks of the upper-

most course of the West Wall are cut out in a semicircular fashion to receive the round cross beams that rested on the square main beam already described (see Section, Pl. I). One of these crossed halfway between the pillar and the North Wall, the second directly over the pillar, and the third, of which only a segment of the socket is preserved, halfway again between the pillar and the South Wall. It is thus for the first time possible to reconstruct the whole arrangement of the roofing of a Minôan chamber.

The timber employed for roofing this small area was certainly of extraordinary dimensions. The main beam was 80 centimetres in breadth and about 60 high, the cross beams had a diameter of 44 centimetres. It would be difficult to find the materials for beams like these in modern Crete.

Once more we are struck with the careful precautions taken against damp in the construction of the walls nearest to the rock face of the hill. The North Wall, instead of being built directly against the cutting in the rock, is separated from it by an interval with short cross walls serving as its support. On the other hand, in accordance with a favourite device of the Minôan architects, the West Wall is kept back from the face of the soft rock by the interposition of a passage way—in this case a narrow staircase.

This staircase is entered from the South-West corner of the Pillar Room and has a width of 71 centimetres. There are ten steps, found in a considerably weathered condition, going up North.[1] The West Wall of the stairs is constructed of good gypsum blocks with limestone here and there: it is built up against the virgin rock and has eight courses preserved, rising to a height of 3·05 metres. The opposite or right wall is formed by the back of the West wall of the Pillar Room. At the top of the stair is a square landing, beyond which two further steps[2] are seen going up West, the upper of which forms another landing. On the North side of this appear the gypsum jambs of a doorway giving access to a gallery running East, in which some paving was visible.

A door-jamb found on this level shows that there was an entrance from this gallery to a room above the Pillar Room. Two jambs found in position on the opposite side of this chamber show that on the South it opened, in turn, into a room above the lower Megaron. Of this upper chamber two jambs with double reveals came to light above the two Southernmost of the line of piers below. A double doorway of this upper hall was found

[1] The steps are 30 centimetres deep and have a tread of 18 centimetres.

[2] The lower of these is of gypsum, the upper of limestone.

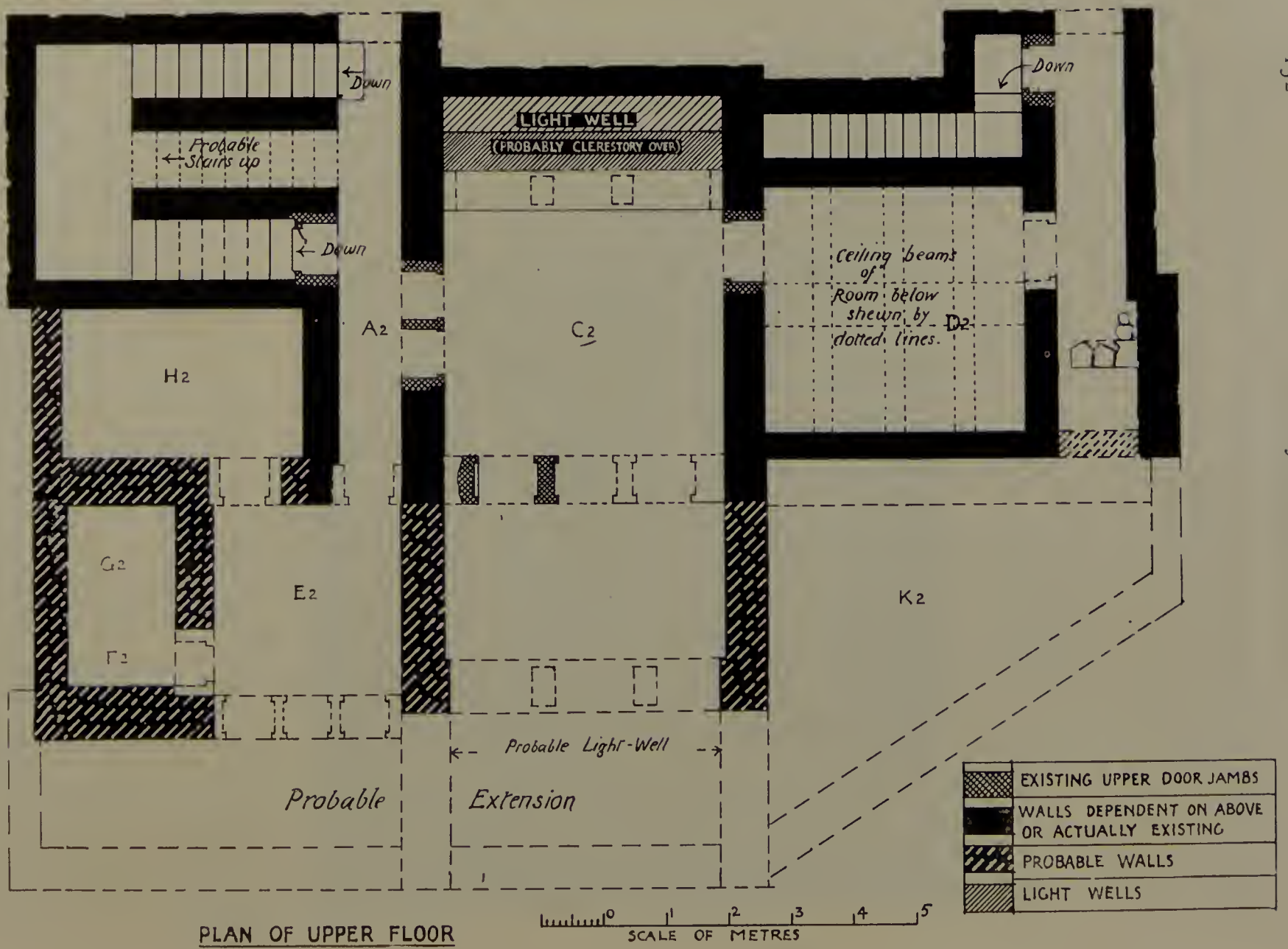


FIG. 91.—PLAN OF UPPER STOREY; ROYAL VILLA.

immediately above that of the Megaron below, leading into the upper Corridor, A 2. These upper storey-jambs, together with parts of the adjoining pavement, have been preserved in position with the help of brick piers.

It will be seen from Fig. 91 that it has been possible, as in the case of the Domestic Quarter of the Palace, to recover practically the whole plan of the first upper storey. It appears moreover that, just as the evidence has been preserved of a large chamber with piers and columns above the Hall of the Double Axes, so here too there seems to have existed an upper hall divided into two sections by a similar line of door-jambs above the principal Megaron or 'Basilica' of the Royal Villa.

A negative phenomenon noticed throughout this building deserves mention. Unlike the generality of the Palace rooms, the remains here contained hardly a vestige of burnt wood. There is no obvious sign of destruction by fire, and the door-posts and beams which elsewhere have been preserved in consequence of their carbonisation had here left no trace beyond their empty sockets. It looks as if the Villa had been plundered and perhaps partially ruined at the time of the great catastrophe and was afterwards left to gradual decay, doubtless accelerated by flood waters and landslips from the declivity above.

ARTHUR J. EVANS.

FIG. 92.—PAINTED POTTERY FROM ROYAL VILLA BELONGING TO THE PERIOD OF PARTIAL HABITATION.

EXCAVATIONS AT PALAIKASTRO. II.

(Plate VI.)

§ 1.—The Second Campaign—Outlying Sites.

We resumed work on March 23, 1903. The headquarters of the expedition were again at Angathia. Mr. M. N. Tod, Assistant-Director of the School and Fellow of Oriel College, Oxford, had preceded me, going overland. Mr. W. L. H. Duckworth, Fellow of Jesus College, Cambridge, and University Lecturer in Anthropology, and Mr. R. McG. Dawkins, Scholar of Emmanuel College, Cambridge, arrived a few days later. Mr. C. T. Currelly, of Victoria College, Toronto, who had been digging for the Egypt Exploration Fund under Professor Petrie, joined us for the last six weeks of the season.

The Roussolakkos trenches being full of water, I decided to start work at Kouraménos on a bay 1½ miles further north, where in 1902 I had seen the foundations of a wall running inland from the sea, enclosing the best part of the plain at the head of the bay and rejoining the sea half a mile beyond. It seemed possible that this was the wall mentioned in the Toplu inscription (Dittenberger, *Sylloge*[2], ii. 929) as enclosing the precinct of Dictaean Zeus, the more so as large blocks were visible on rising ground near the sea. It proved however to have been a τέμενος only in the Homeric sense of an enclosed estate. The excavation gave us the ground-plan of a Mycenaean farmstead, described in detail below (p. 329) by Mr. Tod and Mr. Dawkins.

Meanwhile Mr. Duckworth undertook the further exploration of the ossuaries which had been discovered and partially excavated in the previous season. His full report on these prehistoric human remains and on the anthropographic data which he collected at Athens and in Crete, will

appear in the *Journal of the Anthropological Institute*. A summary of his conclusions was submitted to the Anthropological Section of the British Association last September. In brief, he measured sixty-four male and twenty-three female crania from these ossuaries, in which they were associated occasionally with miniature stone vases, obsidian flakes, small bronze single axes, and triton-shells, and regularly with pottery ranging from polychrome Kamáres to a coarser transitional ware (see p. 300 ff. below), but never with true Mycenaean vases.

'In this early Cretan population longheadedness is quite predominant: of forty-six male crania available for examination thirty (65·3 per cent) are dolicho-cephalic, twelve (26·15 per cent.) are of mean proportions, and only four (or 8·55 per cent.) are short. The corresponding percentage figures for female skulls are 70·6 dolicho-cephalic, 23·53 of mean proportions, and 5·87 of short skulls. . . . The long bones afford an estimate of the stature . . . 1624·9 mm. for men (below 5 feet 5 inches). This is a distinctly low stature, and the bones are slight.'

Thus in head-form and stature, Mr. Duckworth concludes, these early Cretans conformed to the type of the Mediterranean race. The modern type in Eastern Crete is quite different from the prehistoric; the prevailing head-form is now brachycephalic and the stature of the men markedly greater.

Some trial-excavations in the inland glen of St. Nicholas, undertaken by Mr. Tod in continuation of his quest for the Dictaean Temple, enabled Mr. Duckworth to examine skulls of a still earlier period. This region was recommended by the presence of a fragmentary decree immured in the chapel, as well as by its impressive position under the mountain-cone of Modhi. Once more Minôan, not Hellenic, remains presented themselves, first another farmhouse, then a deposit of bones accompanied by pottery presenting analogies to early Trojan and Cycladic types, in a grotto under the cliff. See Mr. Tod's report, p. 336, and Mr. Duckworth's, p. 344 below.

So soon as the trenches had been drained, we resumed work on the town-site at Roussolakkos. The course of this, the main excavation, to which we devoted the next two months, will be described in a separate section. Another subsidiary task was undertaken in April by Mr. J. L. Myres, Secretary of the Cretan Exploration Fund, who arrived with Professor Ernest Gardner's cruising-party, and was induced to exchange the luxuries of ocean travel for the privations of the excavator's lot. I had to go back to Athens for a time, and Professor Gardner was so good as to give me a passage to Smyrna. Mr. Myres explored a building on the top

of Petsofà, the peak overlooking Roussolakkos, with brilliant results. It proved to be a primitive sanctuary, rich in votive terracottas, figures of men and women, legs, arms, and other parts of the human body, and an enormous number of animals, some thousands in all. As he was unable to exhaust the site before his return to Oxford, it was taken in hand by Mr. Currelly, who doubled the 'bag' but obtained few fresh types. See Mr. Myres' report, p. 356 below.

I returned on May 11 with the *Inselreise* party of the German Institute, Dr. Dörpfeld having very kindly brought Dr. Evans and myself as his guests from Candia by way of Gournià to Palaikastro.

The excavation of the town had made great progress under the direction of Mr. Tod and Mr. Dawkins, and Mr. Currelly had prepared a set of drawings of the most important vases while superintending the processes of cleaning and mending in the cottage which serves as workshop. During Dr. Evans's visit I rode with him to Lower and Upper Zakro. At the former place we heard of the finding of a lump of metal, which I was afterwards able to secure for the Candia Museum: it proved to be part of a copper ingot like those of which a store was found at Hagia Triadha. Near Upper Zakro we examined the early site called Ἀθροπολίτους (cf. *B.S.A.* vii. 147), where some terracottas seen by Mr. Evans in 1896 were said to have been found in a small cave. We succeeded in identifying the spot, one of a series of hollows under a low brow of cliff facing east, and from the little earth that remained undug we extracted a large rudely modelled ox, a larger horn, and parts of the legs of two human figures, all in a red clay like the material of the coarser figures from Petsofà. This is in harmony with other small pieces of evidence—such as a steatite blossom-bowl found above the village of Magasà, and two Kamáres vases found at Kochlakiès—which tend to show that the Minôan civilisation was at home in the interior of Eastern as of Central Crete, and was not represented only by trading-factories on the coast, as at one time seemed possible.

One other outlying site was explored in a cursory way. Mr. Currelly and I sailed one Saturday evening round the south-eastern point of Crete to Kouphonisi, the ancient Leuke, and devoted the morrow to a surface-study of the island. We were on the look-out for purple-shell, since a fourth-century inscription mentions a tithe of purple in connection with Leuke. The result was one more instance of the extraordinary predominance of Minôan over Hellenic remains in Crete, for we found not only a

bank of crushed murex-shell, but beside it a whole nest of Kamáres pottery.

As harvest drew near it became increasingly difficult to keep our best men. We had arranged for some supplementary digging at Praesos, but owing to an attack of fever, which forced Mr. Tod to return to Athens on May 28, this was postponed. A week later our preparations for departure were all made, when the French gun-boat *Condor* steamed into Grandes Bay, and Captain Escande with most opportune kindness offered to take two of us along the south coast, an offer which Mr. Currelly and I were glad to accept; we take this opportunity of thanking him for his hospitality, which we enjoyed for two memorable days. We parted from Captain Escande and the *Condor* at Phaistos, where we were entertained by Dr. Pernier, and thence rode to Candia. Mr. Dawkins remained till June 11 in order to finish the plan, and then paid the visit to Karpathos which he has described in this volume (p. 176).

§ 2.—THE TOWN.

(PLATE VI.)

The prehistoric town at Roussolakkos was laid out in regular blocks, each containing several houses. We went on the system of following up the streets and ascertaining the extent of an *insula* before excavating it. The blocks are named β, γ, δ and so on, and to each room as it is opened up a number is given, the Greek alphabet being used in order to avoid confusion with the letters and numbers by which the squares on the plan are denominated.

The excavated area was surveyed by Mr. R. M. Dawkins, who has prepared an excellent plan on which the walls of different periods are so far as possible distinguished; but another season must elapse before the problems of stratification can be handled with absolute confidence. The simplified copy reproduced in this provisional report has been redrawn from Mr. Dawkins' plan by Herr Seyk, draughtsman to the German Archaeological Institute at Athens. The majority of the drawings of vases in this report are also Mr. Dawkins' work, the remainder being by Mr. Currelly and Mr. Halvor Bagge.

It should be noted that in the following articles we have adopted a

conventional orientation following that of the plan ; *north, south, east, and west* are used as though the top of the plan were due north.

Our starting-point was the street west of Block β, discovered last year. This was traced in both directions for a total distance of 145 m., and three successive insulae abutting on it from the south were more or less completely excavated. Three streets at right angles to it were opened up, one for over 70 m. and the others for shorter distances. The streets, though narrow according to modern ideas—they vary from 1·40 to 2·50 m. —are wider than those at Phylakopi. One cross-street by exception has a width of nearly 4 m., between β and an unexcavated block, μ. More than half the breadth of the main street is taken up by a raised and paved footpath ; the part of it adjoining δ has a very massive pavement bordered by a deep gutter, the bottom of which is the upper surface of an older pavement ·85 m. below. Between ε and ο we reached a very ancient road-surface buried in deep rubbish among which were Kamáres vases ; it was paved with rounded cobbles, closely set, much like those in modern Cretan villages.

A detailed description of the several blocks is given in the ensuing sections, but it may be convenient to give a less technical summary of their more important features here.

Further examination of the house in β excavated last year exposed the column-bases, two square and four round, of a verandah in the court, with remains of its burned woodwork. The house in γ on the other side of the main street proved to have a front of carefully squared freestone masonry with frequent setbacks, which correspond with the internal partitions. The hitherto unaccountable setbacks conventional in Mycenaean architecture may have originated in this practice of indicating the junction of a partition wall with the main wall. The stairs opposite the front door are of secondary construction ; under them we found a large well-built bath-room, reached by steps like the sunken bath-room in the Palaces. A house further west contains what looks like a shop, consisting of a room with one side open to the street, and behind it a narrow store-room fitted with a stone sink. The north-western part of the block has been robbed of its stones and there is little hope of recovering the Mycenaean ground-plan, but from the lower levels, more accessible here than elsewhere, came a quantity of early pottery, including a splendid Kamáres 'fruit-stand.'

Block δ lies west of γ, and has a frontage of 40 m. on the main street. Its southern portion, a labyrinth of small rooms shewing signs of frequent reconstruction, did not prepare us for the massive masonry and spacious planning of the Mansion which occupies the northern part of the block. There are two well-marked floor levels corresponding to the two levels in the adjoining part of the main street. A hall of the original house exhibits a group of four column-bases at the corners of a sunken square, precisely like the 'impluvium' of House *B*. The best marked features of the later Mansion are its entrance, 4 m. wide, which led to a stairway of the same width, and a small inner court or light-well, about 5 m. square, which must have been open to the sky, since its pavement slopes down to a broad and deep covered drain.

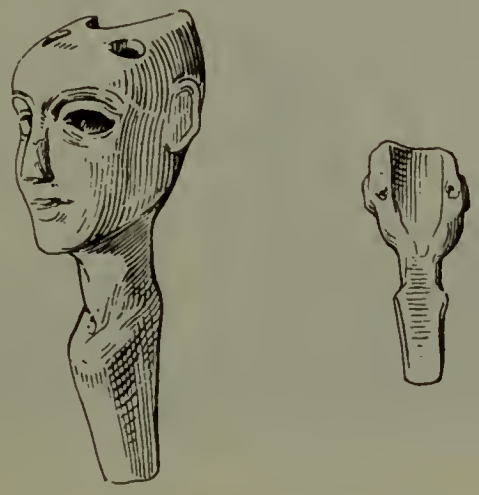


FIG. 1.—FEMALE HEAD CARVED IN BONE.

On the same side of the main street we explored a third insula, ε. The largest house had been much disturbed, and after making a plan we filled it in. West of it are two well preserved houses, each about 10 m. square. In one of them there are the remains of what seems to be an early wine-press, a raised cement floor 1½ m. square, sloping towards a sunken jar.

Block β, of which the house excavated last year occupies a great part, was found to embrace several other houses. One of them contained a spouted jar and two pithoi below it, an arrangement already observed at Zakro and elsewhere, which probably played a part in the manufacture of oil. Another of these spouted jars or oil separators occurred in Block γ; their characteristic feature is that the spout is placed flush with the bottom

of the vase. This year, as last, peas and barley were found in jars, and for the first time at Palaikastro, a few olive-kernels.

Neither inscribed tablets nor seal impressions came to light; but the finding of seven engraved gems, two of them three-sided seals of great interest, attests the vigilance of our diggers. Of small objects the most valuable are a pair of electrum earrings covered with fine granulated work, the rim of a steatite cup bearing four incised characters of the Minôan script, and a well preserved carving of a woman's head in bone (Fig. 1), the eyes and hair of which were supplied in some other material.

Fig. 2.—Sacred Horns (about 1 : 4).

Besides the ceremonial axes from Kouraménos, two, one large, one only five centimetres from tip to tip, were obtained from Roussolakkos, and a series of four Horn-emblems of various sizes carved in stone (Fig. 2).

This year a little geometrical pottery occurred at the east end of the site, some bronzes related to those from the Altar-hill at Praesos, and a remarkable scarab. They shew that in classical times there was a temple here, as the previous discovery of architectural terracottas, which we traced to this field, had led us to suspect. The finding of a stratum of wood-ashes suggests that it was constructed principally of wood.

§ 3.—THE CHRONOLOGY OF PALAIKASTRO AND ZAKRO.

We may divide the life of the town into three principal periods.

I. The Kamáres Period.

II. The Early Mycenaean Period, ending with the fall of Zakro.

III. The Late Mycenaean Period.

Of these the first is well defined, thanks to the labours of Dr. Mackenzie and of Mr. Dawkins, who has treated the sequence of the Kamáres pottery at Palaikastro and the circumstances under which it has been found at some length in his paper on the Pottery. But the line between the second and third periods has not yet been drawn.

The settlement at Palaikastro came into being earlier and survived later than its neighbour at Zakro, the life of which began, as I believe, midway in Period I. and ceased abruptly at the end of Period II. Both Mr. Hogarth and Mr. Dawkins have spoken of the pottery found in the houses there as late Mycenaean; the former describes it as 'almost exclusively characterised by the inferior glaze and debased ornament which we associate with the late efforts of Mycenaean art in the Aegean' (*B.S.A.* vii. 145), and Mr. Dawkins does not contest this judgment in his valuable study of the Zakro Pottery (*J.H.S.* xxiii. p. 254). I am disposed to place it much earlier and to regard the poorer painted vases as of local make and more or less contemporary with the splendid filler from House A, which is unquestionably a product of the Palace Period.

The two houses which I excavated at Palaikastro in 1902 contained floor-deposits resembling those of the Zakro houses. Generalising from these two instances, I assumed that the town had been sacked at that time and never reoccupied. Last year, however, in γ 9 and other houses, we came on floor-deposits containing pottery of quite different types, among them painted vases analogous to these of Ialysos, of Cyprus, and of the Period of Partial Occupation at Knossos. Palaikastro, then, was partially or wholly ruined at the end of the Second Period, about the time of the final desertion of Zakro, was partially reoccupied, and was finally ruined and abandoned at the end of the Third Period, which may perhaps be found to coincide with the final desertion of Knossos.

The pottery of the close of Period II. is best illustrated by the contents of the store-rooms β **10** and **13**. This house had been left in perfect order, and had evidently escaped being plundered. The principal rooms yielded hardly a fragment of pottery, hardly any small objects, while in the store-rooms there were hundreds of vases which had remained undisturbed except by the fall of the upper storey since the owners stowed

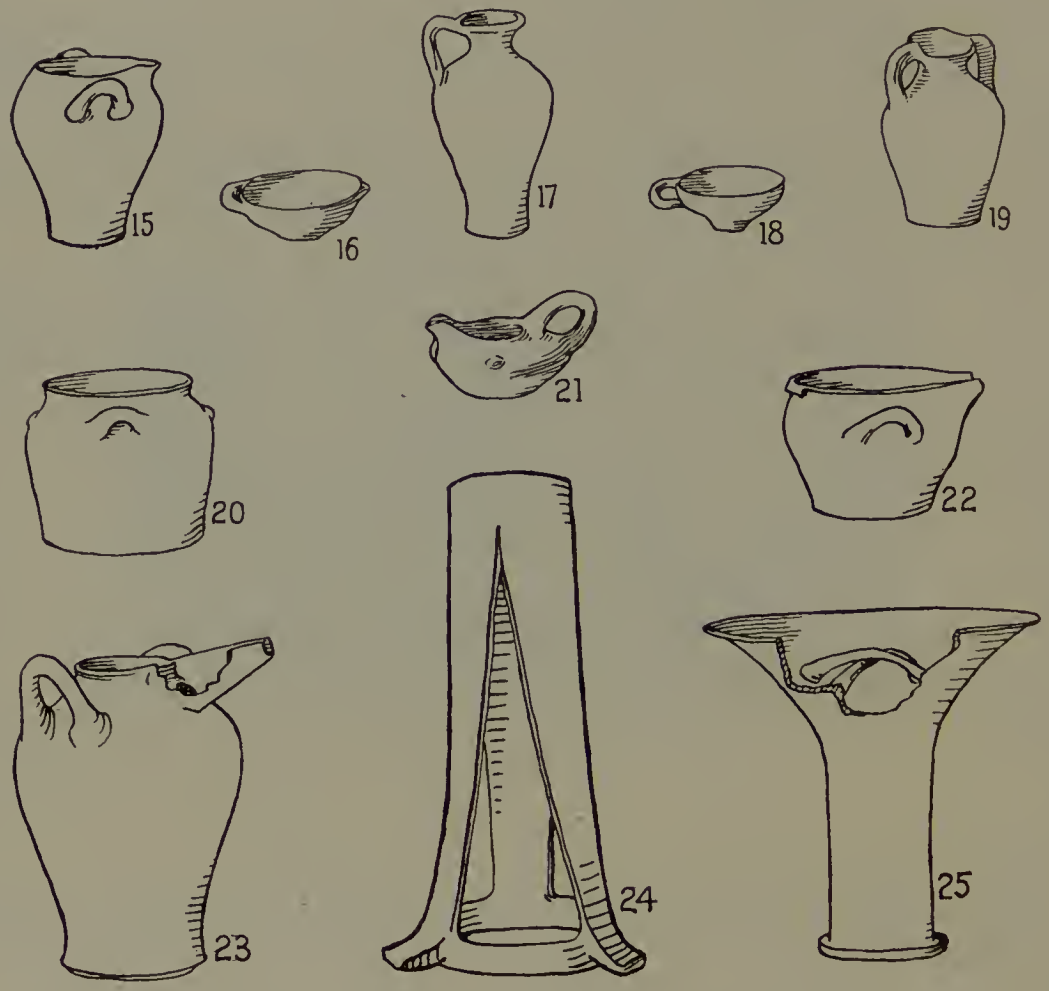


FIG. 3.—FORMS OF VASES FROM β **10** AND β **13**.
Continued from *B.S.A.* viii. p. 309, Fig. 22. (Scale 1 : 10.)

them there. The rooms themselves (β **10** and **13**) were described in *B.S.A.* viii., p. 314, and some of the principal forms were there reproduced in Fig. 22, Nos. 1–14. Others, drawn for me by Mr. Dawkins, are grouped on Fig. 3 of the present paper, and are numbered in continuation of the previous series from 15 to 25. I have inadvertently included two types of cup, 16 and 18, which belong to Period III.; they come from a find in a

different house forming part of the same block (β 26). The following table is a record of the vases found whole or recognisable though shattered. + stands for *fragments of others*, ++ for *fragments of many others*.[1]

FORM NO.	DESCRIPTION.	NO. IN β 10.	NO. IN β 13.	REMARKS.
1	Small cup without handle	"numerous"	200+	All Minôan sites.
2	Cup with handle	—	2+	
3	Pear-shaped cup without handle	—	150+	Zakro.
4	Small jug	see 7	see 7	
5	Tripod cooking-pots	3++	14+	Varied shapes.
6	Small basin	—	1	Also in β 3.
7	Large jug	3++	19++	Also in Third Period deposits.
8	Pseudamphora	—	1	
9	Amphora with elliptical mouth	2+	3+	All Minôan sites.
10	Amphora with circular mouth	—	1 (with ring on shoulder)	
11	Jar with rivet-heads on shoulder	1	—	
12	Pail	1	—	
13	Strainer, one vertical handle	—	1	Zakro (Dawkins, Fig. 25).
14	Strainer, two handles	1+	4+	Zakro (Dawkins, Fig. 20).
15	Two-handled jar with lip	—	1+	Also in ossuary on the Ridge.
[16	Cup with lip and horizontal handle	none found	none found	Third Period type from β 26.]
17	Tall jug, circular mouth	1	—	
[18	Shallow cup with vertical handle	none found	none found	Third Period type from β 26.]
19	Small amphora	—	1+	Zakro (Dawkins, Fig. 10).
20	Cylindrical jar	1	—	Petras, *B.S.A.* viii. p. 284: cf. Zakro (Dawkins, Fig. 22).
21	Squat jugs (lamps?)	—	3	
22	Squat two-handled jar	1	—	
23	Jar with bridge-spout	—	1	Zakro (Dawkins, Fig. 28).
24	Tripod lamp-stand	1	—	Gournià.
25	Kalathos, cross-handles	—	1	Zakro, (Hogarth, Fig. 42).
	Large pithos	3	—	
	Small pithos	13+	1 (+8?)	
	Kalathos, like 25 without handles	—	1	Zakro, unpublished.
P. 325, Fig. 25	Baking-pan	—	1	
	Fire-box	1	—	Zakro (Dawkins, Fig. 34).
	Flat lamp with one wick loop-handle	2+	—	Zakro (Hogarth, Fig. 41).
	Lamp for two wicks on stem	2+	—	Petras, *B.S.A.* viii. p. 285.
	Pyxis with coarse rope ornament	1	—	
	Drain-pipes	2	—	
	Plain straight-sided basin	—	1	

[1] Other objects—in **10**, steatite lamp-stand, ·09 m. high, top ·13 square; 4 pierced labels and 5 pierced cylinder weights of clay; a whole heap of pierced clay balls and cubes, stones with

This remarkable deposit has so many points in common with those of the Zakro houses, as to leave little doubt that the House β 1–22 was deserted about the same time as the Zakro settlement. Only three painted vases were found among several hundreds of plain 'domestic' pots, but they seem to corroborate this dating. They are (*a*) two goblets of the same form and local fabric as one figured in 'Pottery from Zakro' (*J.H.S.* xxiii. p. 255, Fig. 23)—one bears the same ornament of double axes: (*b*) a cylindrical jar with rosette-shaped perforations figured *B.S.A.* viii. Plate XVII. 5; its decoration in white on a red slip has almost disappeared, but some idea of it is supplied by a similar jar found in δ 19 which is painted with a bull's head, a double axe, and flowers drawn in a style less naturalistic and therefore probably later than that of the two fine vases from the Zakro pits (*J.H.S.* xxii. Plate XII. 2 and 3). The lower-level house in δ, where this vase was found, was perhaps ruined at the same time as the house in β; they both exhibit the arrangement of four columns round a central light-well or impluvium which has not been found in the other houses. The group of eighteen painted 'fillers,' which so closely resemble one found in House A at Zakro, came from an adjoining room in δ and seems to have been buried about the same time.

Both β 10 and 13 contained a lower stratum, which has still to be described. The vases rested on a trodden layer of brick-earth and broken pottery; nearly ·20 m. deeper lies the floor proper, formed of hard white cement bordered by a red stripe ·02 m. in width and distant ·13 from the wall. Unlike the whole vases above, many of the sherds shewed evident marks of exposure to fire. The most important object found in this stratum—or for that matter in the season's work—was a clay tablet ·10 m. long, ·7 m. wide, from ·009 to ·013 m. thick, baked grey by the fire, and incised with seven lines of writing in a form of the linear script which at Knossos, Mr. Evans informs me, is found only in certain deposits dating from the early period of the great Palace (cf. his remarks, p. 52 above).[1]

natural perforations, broken vase-handles in clay and stone, a hoard made for some practical purpose, perhaps for use as loom-weights or net-sinkers. In 13, two whetstones.

The shattered condition of the vases was accounted for by the broken slabs from floor and wall-facings of the room above which lay on and among them. Many of these slabs were coated on one side with fine white stucco; some had been fused by the heat of the fire into a sort of slag.

[1] Minor finds here—β 10, bits of bone pin, triton-shell, flake of obsidian: 13, bits of bronze pin, obsidian, a grey flint, half of a hemispherical steatite bowl with one ledge-handle.

FIG. 4.—JAR WITH INTERNAL FUNNEL, FROM EARLIER STRATUM IN HOUSE β, ROOM 10. (⅓)

FIG. 5.—JUG FROM EARLIER STRATUM IN HOUSE β, ROOM 10. (½)

The potsherds stand to the whole vases above them in the same chronological relation as those of the Zakro Pits to the vases in the Zakro houses: indeed they have much in common with the pottery of the Pits. These were:

(*a*) The only whole vase, a juglet of a type common to the ossuaries, where it is no doubt a late form, and to the Pits (*Zakro Pottery*, Fig. 11).

(*b*) Numerous fragments of late Kamáres cups with plain black surface tending to brown, and one with three white stripes on the outside—another link with the ossuaries.

(*c*) Lower part of a Kamáres bowl with impressed lines (cf. *Zakro Pottery*, 249, 3, four specimens from the Pits). Another instance of this technique occurred in β **29**, at the lower floor-level, along with the white neck of a filler like *J.H.S.*, xxii. Pl. XII. 3, and other types known from the Pits.

(*d*) A four-handled jar, put together from fragments. It had an internal funnel, a peculiarity which links it with *Zakro Pottery*, Fig. 16. See Fig. 4. Our example has the orifice on top of one of its handles, otherwise it resembles the Zakro specimen. The eyes of the spiral and the horizontal bands were once picked out with white. The frieze of lunettes was common in the Pits.

(*e*) Fragments of a conical filler of early style.

(*f*) A jug with long bridged spout and cylindrical neck (Fig. 5), put together from fragments. For the form, developed by the addition of the neck from one common in Kamáres ware, compare a magnificent spherical-bodied jug from Knossos (frieze of spirals with dot-rosettes in added white) and contemporary imitations found in Melos (*Phylakopi*, Pl. XXV.). The design, a conventional representation of seaweed growing from rocks, was already known from the fine goblet found in the Vaphio tomb (Ἐφ. Ἀρχ. 1889, Pl. VII. 19), from fragments found in the dromos of the same tomb, and from others at Phylakopi; there is a more sketchy version of it on the Palace-style vase from the Heraeum.

Now *a*—*d* are types found in the Pits at Zakro, which, as Mr. Dawkins has shown, contain an accumulation of pottery extending over the period preceding the abandonment of the site; while *f*, perhaps the latest of the series, is linked by the Vaphio parallel with some of the best products of early Mycenaean art, and so furnishes a relative date for the earlier fire

which left this lower deposit on the floor of β **10** and β **13**, and probably occasioned the rebuilding of the house.

§ 4.—THE HOUSES. BLOCK β.

This *Insula* is now seen to contain five houses, (i) 1–22, (ii) 23–25, (iii) 28–31, (iv) 26, 27 and 32–39, (v) 40–47. The partial excavation of 1–36 was described in *B.S.A.* viii. pp. 310–316.

Rooms **1–22**.—The continued investigation of this house yielded some interesting results. In the courtyard (**11**) we uncovered the remains of a verandah, the wooden pillars of which rested on round limestone bases (diam. ·38 m., ht. ·18) distant 1·40 m. from the walls of rooms **10** and **12**. On the East, rectangular bases alternated with the round ones, as in the courts of the palaces at Phaistos and Gournià; these probably supported piers of brickwork or stone. A quantity of charred wood, brick-earth, and freestone blocks reddened and disintegrated by fire, lay over and round about the bases. At the West end of **13**, where the plan shews a double wall, part of the later one ·55 m. thick was removed, exposing a face of well-finished small ashlar coated with white plaster. The precisely similar masonry of a small house on the South of the Ridge was shown by the pottery found in it to be as old as the Middle Minôan period. **15** may be explained as a bath-room; its entrance was at the N.W., screened as usual by a cross-wall, not at the S.E. angle where the previous plan shewed it; its carefully plastered floor (*Palaikastro* I. p. 315) was level with the adjoining floors, as was that of the bath-room in the Queen's Megaron at Knossos. Further knife-work in **22**, a square closet under the stairs which had yielded a quantity of rustic pottery in 1902, brought to light four large jars in a row against the back-wall, and two—one telescoped into the other as though originally placed on top of it—on the left. The floor is of pebble-concrete. Besides broken vases of types found in rooms **10** and **13**, there were a clay 'fire-box,' a bronze sickle, a bundle of five needles (?) and three painted vases which seemed to have fallen from a shelf—a four-handled pyxis with a band of spots like the pseudamphora *B.S.A.* viii. p. 313, Fig. 26, the beaked jug figured on p. 285, and another like it. Two much finer vases had been packed away inside one of the *pithoi*. The uppermost, a flask decorated with polyps, coral and shells, was much crushed; the other, a magnificent oenochoe with a curious strainer-mouth, painted with two groups of three papyrus-like flowers, was broken only at the neck.[1] Both belong to an interesting class of early Mycenaean vases, the slip of which varies from warm yellow to a greenish grey, and the paint in like manner from warm brown to black; the greenish-grey and intense black tones are due to overfiring, and when they are found together the paint is always very friable. The contents of this room were probably buried at the same time as those of **10** and **13**.

Rooms **23–25** originally formed an open court (**24**) from which opened a single room (**25**), perhaps a stable, the two rooms which encroach on the court

[1] Like a flattened gourd with wheel-shaped body, elliptical mouth, and two small handles high on the shoulder. I know only three other examples of this rare form, found at Knossos, Psychro, and Phylakopi, all fragmentary. It is a forerunner of the spherical gourd (p. 316, Fig. 15 below), of which an early example was found in the Cave at Psychro.

being of later construction. The level of the court had been raised by filling it up with miscellaneous materials brought probably from some rubbish-heap; possibly it was liable to be flooded by the water which, as other indications show, flowed away down the adjacent street. Among the finds made here this year were a nodule of liparite, a small spouted steatite bowl, a small steatite lid, a bone awl, a quantity of small cups, fragments of wall-plaster (red-brown, yellow, dark blue, and white), and a large lentoid gem of late form and design: numerous fragments of 'rustic' pottery, but few of painted ware.

Rooms **28–31** form a separate house, with a door probably at the S.E. angle. No fresh finds were made here.

Rooms **26**, **27**, and **32–39** form another house, partially excavated in 1902. What was then taken for the threshold proves to be a stone bench, the actual threshold being hard by, facing up the street towards γ and δ. The level of the door-sill had been raised and a rough causeway, about ·40 m. wide, ·45 high, built from it along the street; and at the north end of the street, where it turns sharply to the W., a kerb had been built to guide surface-waters round the corner. These precautions, and the raising of the floor of β **24**, noted above, indicate that after heavy rain the drainage of the southern part of the town escaped down this street. The paved vestibule with stone bench in a recess on the left repeats a familiar arrangement (cp. β **8**, γ **1**, δ **47**, and Zakro G); beyond the bench is a cupboard containing four plain jars. Next comes **32**, the main living-room, which gave access to **26**, **27**, and probably also to **33**, **35**, **36**, and **37**, though the position of their doors is uncertain. The deposit of vases in **26** (*B.S.A.* viii. 316) belongs to a later period than any in β **1–22**; on the other hand the group of large pithoi in **33**, which stood at a lower floor-level, may have survived from the earlier period of destruction. since the decoration of the painted example (sprays, double-axes, and four-leaf whorls) is in a meticulous style precisely like that of the local painted ware in the Zakro houses and in β **13**. Some olive-stones were found on the floor of **32**, and in **37** there is a group of jars which probably played a part in the manufacture of oil, consisting of an earthenware tub with a spout projecting over a pithos, the spout being flush with the bottom of the tub like that of the Hellenistic oil-separator at Praesos (*B.S.A.* viii. 268); similar groups were found at Zakro and at Gournià. In this case the 'separator' stands on a raised stone platform, and the recipient is not sunk in the ground. Among the earth in the latter was a steatite prism-seal (man, goat, ox-head). A quantity of carbonised matter was noted near the floor-level. The minor finds were a bronze axe-and-adze, a plain jug with flat base of the type found in o **4**, a scrap of lead, and a *dolium*-shell. **35** yielded part of a clay lamp-stand like Fig. 24. **36** contains a stone trough, and a squared block in the middle of the floor, below the pavement, which probably served as base for a wooden pillar, as in **29**. In **38** there were found an engraved amygdaloid gem, a bronze hook with twisted shank of a type already represented in the Candia Museum, and a hone; this room had two floor-levels, both originally paved but much disturbed.

Immediately N. of **36** and **39**, in square G 3 of the plan, there is a space which seems to have been vacant in the later Mycenaean age. A pit sunk here revealed a considerable accumulation of Mycenaean pottery and below that, after an interval, a very compact bed of Kamáres sherds, of early types. Between the two there is an ancient floor-level and the footings of a wall are preserved. The sherds rest on virgin soil and stop short against a face of virgin soil to the N.

The accompanying diagram prepared by Mr. Dawkins (Fig. 6) explains the stratification. See his remarks, p. 298.

Rooms **40–47** may prove to have been entered from the courtyard of the main house, *β* **1–22**. In some of them the subsoil rises about ·60 m. above the level of the adjoining street and there is no depth of soil; the whole northern half of the house is much destroyed and was only superficially excavated. **40** contained a remarkable deposit of 59 small Kamáres vases, resting on the raised subsoil; they must have been protected by a floor above them of which no trace remains. Ten of them are

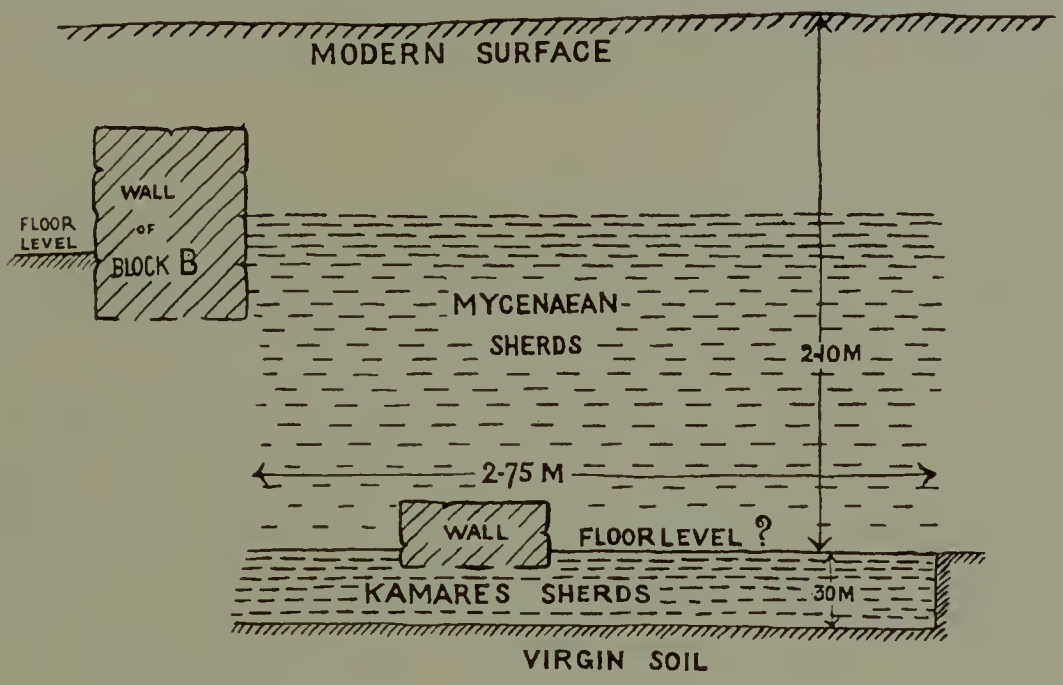


FIG. 6.—DIAGRAM SHEWING STRATIFICATION OF PIT IN G 3.

jugs with bridged spouts, the remainder beaked jugs, cups, and tumblers (see Mr. Dawkins' remarks, p. 307 below, and Fig. 7). **42** contained a trough with three cup-like depressions, possibly a 'table of offerings,' since near it was a miniature pair of horns (Fig. 2, in foreground), and two pieces of stalactite brought perhaps from some cave-sanctuary. **43** yielded a big clay scoop, and **47** part of a steatite lamp and of a steatite cruet-stand with three cups and a loop-handle. **43** and **47** have floors of pebble-concrete, and in the latter there is a central column-base.

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EXCAVATIONS AT PALAIKASTRO. II.

§ 5.—The Houses. Block γ.

Block γ lies South of β on the other side of the main street. An L-shaped area, nearly 900 sq. metres, has been uncovered.

Rooms **1—12** form the most important house in the block. The entrance, which faces the centre of the façade of Block β, and part of the vestibule were uncovered in 1902. The façade of this house, as far as it is preserved, is built of large squared freestone blocks. On the left-hand side of the entrance they have been removed, yet enough of the sill-course remains to shew that the house-wall had several insets, and these insets occur at the places where the partition walls, that divide the rooms inside, meet the main wall. This massive style is confined to the front wall, where it was adopted to present a fine appearance on the main street.

Immediately inside the threshold with its plinth and finely squared freestone blocks on both sides is a small vestibule with a recess on the left, containing a stone bench, under which passes a drain, and a threshold on the right. Facing us is a fine threshold; at each end of it is a pivot-hole, perhaps as at Tiryns once lined with bronze. This being the main door of the house the vestibule was like a porch. An earthenware bath-tub was found here in 1902.

Passing through these doors we turn to the left, and passing the foot of the stairs, find ourselves in **3**, a central room (*megaron* ?), floored with the usual pebble-concrete, from which access is gained to the other rooms. Near the remains of a slab pavement are two circular pillar bases, the only remains of the four that no doubt once existed here.

This megaron was the scene of considerable alterations at a relatively late period. As it exists now, the western half is filled up by the stairs and a small room adjoining them, the walls of which served to support a landing or second flight. This room can hardly have been directly lighted. It is thus natural that a fine steatite lamp of the usual two-wicked type was found in it. Two toy vases were also found here. These structures which stand free, all but one corner, in the megaron, and whose walls do not run square with the walls of this latter, were shewn to be an addition to the original plan of the house. The clue to this discovery was found in clearing out the narrow passage left behind the stairs. In this passage three steps were found leading down in the direction of the front door of the house. Behind the topmost step the clay floor was found to be full of pottery. When this

pottery was being cleared out, the space it occupied was found to run under the central room, and eventually a square walled recess was excavated situated under the floor of this room. Removing the masonry from the north corner of the central room, we found that the walled recess was a room to which the steps first found had led down. One descended the steps, turned to the right, and one more step brought one into this lower room. It was in fact a bath-room of the type discovered last year in β 3. When the stairs were constructed the bath-room was filled up, partly by a wall which ran along its North side, and partly by packing, which, fortunately for us, consisted largely of pottery. Then on the foundation thus formed the stairs and the room adjoining them were built. A similar example of a bath-room so curiously close to the centre of the house is afforded by the Queen's Megaron at Knossos, and also by the Throne-room at the same place.

Rooms 4–8 contained nothing of interest, except a triton-shell on the floor of 6.

A door from the vestibule leads by a crooked passage to 2 which had a cement pavement. From the megaron rooms 9 and 10 are reached, both well paved, the former with cement, the latter with stone slabs. A list of the vases found in 9 will give an idea of the contents of a productive room. It contained four amphorae ranging in height from ·35 to ·40 m., unpainted except for rough splashes of black; the open-mouthed painted amphorae shewn in Fig. 18, p. 319; two large pseudamphorae, one decorated with stripes on the shoulder and ·42 m. high. These vases were found clustered together. Besides these there were a three-handled *pithos* about ·70 m. high, painted in the degenerate Mycenaean style, and a tankard-shaped mug. A 'spit-rest,' a pestle, and a black cowrie shell complete the list. Room 11 seems to have been a courtyard formed by the space between different houses. From it a passage leads to 12, which opens on the street, and thus forms a side-entrance to this house, to which, rather than to the following, room 20 as it opens on the passage also belongs.

Rooms 13–22 plainly formed another house, with one entrance from 13 into the main street. A paved structure in this room may be the bottom of a flight of stairs giving access to upper rooms. As the walls stand, however, the system 14–18 can only be entered from 22, a region which now presents the appearance of one large room; further excavation southwards may make the plan clearer. The region has suffered from the removal of ashlar blocks, and old workmen remember this area as having yielded many of these for building material. 22 was extremely fertile in fine Kamáres ware (see p. 307) which was found immediately above the virgin soil. The finest vases came from a specially deep pocket, but outside of this the deposit was much confused, probably owing to the disturbance of the soil by the removal of stones. 16 yielded good painted plaster. This occurred almost everywhere on the site, but these fragments are noteworthy, because they possess all the colours found, arranged in stripes—white, dark and light blue, yellow, crimson, orange, and a dark Pompeian red. Green has not been found. This room also yielded a piece of a fine thin-walled steatite basin (diamr. over ·20 m.) decorated round the rim with an incised double zigzag ·30 m.

Rooms 23–32 form another house, which opens from 24 on the paved lane between γ and ε. Near the door are the stairs, and under them a small room or cupboard, as in the megaron of the first house. The two ashlar blocks at the corners of this little room were part of the supports of the landing. The example

of β **22**, which is a similar cupboard underneath the stairs, might lead one to expect here a store of vases. A fine painted fragment and a clay animal from the bottom of a cup are however the only finds noted, besides, as under the stairs built over the bath-room in the first house, a clay lamp, which is a natural thing to find in a place that must always have been dark. In the rooms N. of the entrance are traces of earlier walls. To **27** no door has been found. **26**, **28–32** cannot be entered from the street, and may belong to some unexcavated house on the West.

In **32** was found a large tub like one in β **37**, and in **30** a pair of electrum earrings. The quantity of black earth in this room testified to the destruction of the house by fire.

Rooms **33–38**.—**33–36** have no external entrance. **37** and **38** may perhaps have been some kind of shop. The whole width of **37** is open to the street. A double entrance, with door-jambs of the usual form, leads into the inner room, in which were four pithoi, one lying on its side across the others. Another contained peas in a carbonised state. With these was a painted Mycenaean lipped cup, the mouth of which was closed with a strainer. On a ledge on the North wall is a stone sink, connected with a conduit of channelled blocks, which runs through the outer room and, making a double turn under the corner of the wall, empties itself into the street. The channel is covered with stone slabs. This sink and drain, together with the jars, and a collection of four small stone pierced blocks of similar size, that were probably weights, make it clear that the rooms were used for some industrial purpose. The outer and inner rooms suggest the combination of shop and store-room that one sees now in Cretan towns.

Rooms **39–46**.—To make these rooms clear more excavation is needed. **39** opens on the street, as if leading into a house. **40** and **41** were stores of common pottery; **40** especially containing large numbers of small plain cups.

§ 6.—Block δ.

This block, although not fully uncovered, is already the largest yet found (area 1800 sq. m). It contains several houses, one being in point of architecture the finest yet found. Unfortunately this excellence has led to much destruction, for the freestone blocks used in the best walls are prized as building material by the modern inhabitants. In consequence much of this insula, especially the West end, is completely ruined. There has also been much rebuilding, by which the level has been raised. Thus the fine pavement of the main street in front of this block is secondary: the earlier street was at the level of the bottom of the gutter, which is in fact formed of the part of the earlier pavement left uncovered by the construction of the new way.

Rooms **1–16**.—The plan is hard to make out, because of the absence of doorways. In **1**, **7**, and **10** there were walls of an earlier house. *Rooms* **8–16** make up a fairly clear house, with a door on Street γ-δ. Near the entrance are the stairs.

3 and 4 stand out clear and square amongst the irregularities of the surrounding walls, 4 being of special interest, because from it came the big find of painted 'fillers' described below. These were all close together, resting on a floor of concrete, within a few inches of the surface, and the ploughshare must for years have almost broken off the points of the long conical pillars, which were resting on their large ends.

Rooms 46–48 form a house entered from the side-street, much ruined and not completely excavated. R. of the entrance is a mass of earlier wall, over which passes an additional doorway to 16 in the house described above. The street by the door and further S. contained at a lower level than the threshold a great deal of Kamáres pottery, contemporary with that from the cemeteries; this deposit will be discussed below (p. 304). It is probable that when the later house was built, the site was levelled up with the débris of older structures; the lifting of the pavement in *Room* 32 disclosed Kamáres sherds. Outside the main threshold is the usual recessed seat. In 45 were half a dozen large pear-shaped pseudamphorae.

Rooms 18–40 shew the most interesting architectural features in the block, and here also the process of rebuilding can be traced most clearly. The main feature of the earlier house was the megaron (19), with its four pillars at the corners of a square unpaved space, all lying below the floor-level of the later house. The foundation of its western wall can be traced, broken by two doorways with ashlar jambs of the usual type. Part of its southern wall runs under the later wall of 25, and probably under the pavement of 26. The limit towards the street is shewn on the plan by dotted lines; its position was fixed by the only actual remains, two doorjambs, one at each corner. It was thus a room about 5 m. square. The entrance, now concealed by later structures, must have been on the main street, from 20 or 21. The square pillar, faced with plaster, found in 20, stood in the outer court near the entrance. 18 was an inner room only accessible by passing through the megaron. Near by are numerous other traces of the earlier house. The northern part of room 28 is at a higher level than the other half; so also 26 is higher than 27. In room 29 there are remains of walls at a lower level than the remains of pavement. The amount of slab pavement at both levels, but especially at the higher, is very noticeable. The three pillar bases in 20 must, from the irregularity of their position, have fallen from an upper floor. Further, of the two of them that shew taper, one tapers upwards, the other downwards. One is much disintegrated by fire, and bedded on charcoal; there are many other indications that the first house was destroyed by fire.

When the second house was built, the megaron was covered up, and a fresh entrance was made at a higher level. The level of the street was also raised; to this period must also belong all the fine façade from 20 to 36. The façade of 18 is probably of the older period, as it is not parallel with the edge of the gutter as the rest is. The level of 21 was raised by packing it with stone blocks; thus an entrance was made at a higher level, to which a slab fixed across the gutter served as a bridge. To this later structure belongs the impluvium 23, a paved space $3\frac{1}{2}$ m. square, surrounded by a higher pavement. That it was open to the sky is shewn by the fact that it has a drain running down to the street, along the West side of 21, and emptying itself into the gutter just on the right hand side of the door. This drain, like that in γ 37, is made of stones channelled out, and seems under the pavement of the later, and above that of the earlier house. The paved square in 40, formed of two huge slabs, may have been a similar impluvium, but this part of

the house is much destroyed. **34**, **35**, **36** on the right of the doorway have no entrances. Further, the inner side of the front wall is not faced at all, but left perfectly rough. Considering also the rise of level, it seems likely that these were massive substructures rather than rooms.

Room **38** was remarkable for the discovery of two large standard lamps and a highly polished lamp-stand of steatite. The finest lamp was ·43 m. high, the shaft being decorated with bold mouldings, the other ·28 m. high and ·30 m. in diameter. The lamp-stand ended at the top in a flat table with ear-handles. Fragments of a white limestone base were also found; this had four perforations, and was probably the lower part of a lamp-stand. The most westerly part of the block yet excavated shews remains of a doorway facing W. and a good deal of pavement at two levels is preserved, but most of the walls have disappeared.

§ 7.—BLOCKS ε AND ο.

In Block ε at least five houses can be clearly made out. It is triangular and covers about 760 sq. m. It is separated from γ by a narrow lane that runs up the hill from the main street, from ο by a narrow, crooked, lane and from the unexcavated Block ζ by a straight, well-paved street. This street, as running level, has no gutter like the lanes that lead down to the main street on both sides of ε.

Rooms **1–18**.—This house occupies the northern part of the block, where the ground slopes downwards to the main street, from which it is entered by two steps, leading into a vestibule (**2**) with a stone bench on the left and a door on the right. The earth in this region was very thin and the exact position of the doors was lost. The left-hand suite of rooms (**4–7**) could only be entered from room **3**; otherwise they are entirely shut off from the rest of the house. Owing to the slope of the ground the two lower rooms of this suite are reached by steps. Room **4** goes deeper than the others, the subsoil having been cut away. It contained an immense mass of pottery. Besides sixteen bowls, some of them painted with Mycenaean running patterns, and cups of various shape, there were no less than 980 of the small handleless unpainted cups so common in Mycenaean houses—by far the largest hoard of them found in any room. Room **4** contained the bottom of a clay bath-tub, like those sometimes used for interments. Another find of note was made in the passage between **10** and **11**—four large vases of the form shewn in p. 324, Fig. 24, No. 4.

Rooms **18–20**.—This small house lies S. of the last, and opens on the paved lane γ–ε. Wedged in between two larger houses, it consists of only three rooms. In **18**, which was well paved with slabs, two saddle-querns were found standing on projecting masses of masonry. As an open-mouthed pithos was found standing below each of them, they were probably in situ.

Rooms **21–28** occupy the S.W. corner of ε. Some earlier walls beneath them require further investigation. The fine concrete floor and pavement in the two halves of **24** point to this having been the best part of the house, just as the stone trough and saddle-quern and coarse pottery found in **28** suggest that this, furthest from the front door, was the kitchen.

Rooms **29–35** are built on the remains of an earlier structure, the walls of which are especially prominent near the entrance, which is in the street ϵ–ξ. The façade is of ashlar masonry, the only instance of this style in the whole block. Remains of a later house were also found at a slightly higher level, so that here there is evidence of three distinct periods of habitation. This later house may be Hellenic (a fragment of geometric pottery occurred in it), and connected with the later temple on this site. This eastern area of the town is also the one where all the high-level finds of Hellenic objects were made. The lowest house will belong to the earliest period of the habitation of the site, the period of the Kamáres style, called by Mr. Evans 'Middle Minôan,' whilst the second house, to which the bulk of the remains belong, is clearly contemporaneous with the rest of the town, and is therefore Mycenaean. To the earliest house probably belonged a remarkable vase found in room **32**, a clumsily made tall Kamáres amphora, with handles high on the shoulder, roughly decorated with stripes of white paint. This characteristically early shape is illustrated by the vase on the right in *B.S.A.* vii. p. 11, Fig. 4. In the S.E. corner of the Mycenaean house (room **29**) was found a winepress, with the bed and receptacle for the must preserved—a remarkable discovery. The bed of the press was underneath the corner of the latest house, appearing on both sides of the wall of this latter. It is supported on two sides by the house wall, and on a third by a wall built out for this purpose. On the fourth side it slopes down to a pithos, which is built into the fine hard plaster of the bed to its lip. Into this pithos the juice would flow off the slightly sloping bed. Just between the bed of the press and the wall above it, two or three clay lamps were found of the characteristically Mycenaean type shewn in p. 326, Fig. 27, No. 1, a discovery which clearly dates the House of the Winepress. In **33** was found the lip of a steatite cup, bearing four linear signs.

Between these houses and the eastern limit of the block is a region whose plan has not been clearly made out. Here also there are remains of a later house at a higher level, though not so well preserved. At the extreme corner of the block the fifth house opens to the main street. Crossing the threshold, one finds oneself in a vestibule, from which a paved passage leads to the right into the other rooms of the house. In this arrangement of the entrance, this house is like the first one in this block. Facing the front door was a narrow flight of five steps. In this vestibule were found a strainer of the common type shewn in last year's report (*B.S.A.* viii. p. 309, Fig. 22, No. 14), and the fragments of a steatite lamp destroyed by fire. Of the action of fire this vestibule shewed abundant traces in the shape of charcoal and the red earth that is formed of burnt and disintegrated brick. Across the paved passage that leads from the vestibule runs one of the walls of the later house, which, like the one above the House of the Winepress, is to be connected with the later Hellenic Temple. Only ·30 m. above the Mycenaean pottery, which choked the narrow paved lane that runs up just past the entrance of this house, was found a fragment of a bronze tripod. A fragment of another of different pattern had been found in 1902 in the main street outside *β* **15**.

BLOCK *o*.

The last of this block, that has been excavated, lies opposite to block ϵ on the other side of the crooked lane ϵ–*o*. It consists of a raised knoll of rocky subsoil between this lane and the cul-de-sac formed by the continuation of Street ϵ-ξ. On the top of this knoll rests a single square room. The slopes up to it are piled irregularly

with stones. Here were found a number of rough flat-bottomed unpainted jugs of early type (see p. 322, Fig. 21). In this point this building resembles **β 40**, which also lies directly on a knoll of rock and contained early vases. It would seem likely that in these places any later buildings would have risen so high as to have been quite destroyed. The character of the pottery in any case shews that we have here buildings dating from the earliest period of the town.

The cul-de-sac to the South of this building rises towards its end, and is roughly paved with cobblestones, highly polished by wear. It must at some period of the town's history have formed a thoroughfare, perhaps at the time when the deposit on o was laid down. Its present condition is quite enigmatic.

The removal of the surface soil revealed the existence of more buildings to the south-east, but these have not been followed up.

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EXCAVATIONS AT PALAIKASTRO. II.

§ 8.—The Pottery.

§ 1.—A very great quantity of pottery has been found in the two seasons' work at Palaikastro. It will give an idea of the amount to say that in the season of 1903 about 650 vases were found more or less complete, of which 160 come from the cemeteries and the rest from the houses. In addition the Roussolakkos site yielded great quantities of fragments. From fifty to eighty baskets full were brought in daily. All the sherds were washed, a record kept of their nature, and the more interesting kept as samples. The rest were piled in labelled heaps for future reference or search.

In giving an account of this pottery it will be best to follow as far as possible a chronological order in dealing with the various fabrics. Both in this and in other ways, Dr. Mackenzie's article, 'The Pottery of Knossos,' *J.H.S.* xxiii. p. 157, which has been followed here as closely as possible, has cleared the way very much. The article on the 'Pottery from Zakro,' *J.H.S.* xxiii. p. 248, was unfortunately written before it appeared.

Setting down in chronological order the places from which the pottery came, we have :—

I. The cave-burials of H. Nikolaos, with their hand-made pottery of very early shapes.

II. The Kamáres cemeteries. These include (*a*) The burials on the gravel ridge described in *B.S.A.* viii. p. 290. These as a whole are the earliest of all. (*b*) The large bone-enclosure, shewn in *B.S.A.* viii. p. 291, Fig. 5. (*c*) The bone-enclosure at Patema.

III. The early deposits, five in number, on the Roussolakkos site. It is these deposits that enable us to connect the cemeteries with the town, for the pottery that was in use when the houses were abandoned is very much later than this, and belongs to an advanced stage of Mycenaean technique. As the remains of earlier houses are found in many parts of the town, so there occur several of these Kamáres deposits. Outside these definite deposits, the good Kamáres ware found in the houses was extremely small in quantity, and may very well have come from below the level of later floors. These deposits are :—

(*a*) The low-level stratum of pottery found in G 3, whose position is shewn in Fig. 6, p. 289. This is probably the earliest, for, besides its depth and the character of the Kamáres ware, it contained the bulk of the polished thick ware described below.

(*b*) The deposits in γ **22** (p. 291), and in the space outside δ **48** (p. 292) where the street widens. These adjacent deposits also contained ware of the early cemetery types, mixed with vases that appear to be later than the best period of Kamáres technique, and resemble those shewn in 'The Pottery of Knossos,' Fig. 6.

(*c*) The early pottery from β **40** (p. 289), which yielded fifty-nine Kamáres vases, consisting of cups and various types of beaked jugs.

(*e*) The small coarse flat-bottomed jugs from Block *o*.

IV. The town floor-deposits, with which go the ware from Kouraménos, from Kastrí, and from the beehive-tomb described in *B.S.A.* viii. p. 303. These vases, as will be seen below, belong some to the best period of the Mycenaean style, some to the period of its decline, when elements of the geometrical style were beginning to appear. Definitely earlier than the latest of these floor-deposits is the pottery in the filled-up bath-room in Block γ.

V. A few 'geometric' vases from the higher, probably archaic Greek, deposit on the Roussolakkos site.

Treating this pottery according to fabric, we have, still following the chronological order : (1) Handmade, unpainted fabrics, from I. II. and III. above ; (2) Kamáres ware, almost entirely from II. and III. ; (3) Mycenaean painted ware, from IV., ranging from the best period to the period of transition, and including the geometric vases of V. ; (4) Plain domestic

ware, which, as it comes mainly from the floor-deposits, is mostly contemporary with the Mycenaean painted ware.

1.—HANDMADE, UNPAINTED FABRICS.

§ 2.—Nothing so early as the vases from H. Nikolaos has yet been found in this district. Their 'Cycladic' shapes and scanty use of incised ornament have been described below (p. 340). Next in age come some vases from the burials on the western slope of the gravel ridge near the town. This yielded a little ware, either incised or decorated with impressed triangles, which, by the position in which it was found, connects the H. Nikolaos vases with the succeeding Kamáres period. One of these vases of globular shape with suspension holes has been figured in last year's report (*B.S.A.* viii. p. 290, Fig. 3), where the deposit is fully described. A further link is furnished by the little lid (Fig. 1, No. 14) from the large bone-enclosure, which was clearly made to be tied on as a cover, like the hat-shaped lids of the H. Nikolaos vases. But Palaikastro has not yet yielded satisfactory ceramic evidence to bridge the gap by shewing the transition from the incised to the painted style.

It is worth while to notice the comparative elegance and fineness of the early unpainted ware of Palaikastro, and its agreement in these points with that of Zakro, described by Mr. Hogarth in *B.S.A.* vii. p. 142. In both places also two fabrics are found. The first has a burnished surface, and its decoration consists of finely incised lines or scratches: in the second the markings are more softly engraved on a dull surface. The vase from the cemetery figured in the first report (*B.S.A.* viii. p. 290, Fig. 3) is of this second kind. No fragment of the coarser handmade ware of the earlier Knossian strata has been found at these sites, which also as yet lack the very early painted ware found at Knossos and classified by Dr. Mackenzie as Early Minôan. Specimens are shewn in 'The Pottery of Knossos,' *J.H.S.* xxiii. p. 167, Fig. 1. The inference seems to be that the unpainted handmade pottery continued to be made here later than at Knossos, and had time to develop to greater elegance, and that then the fully developed polychrome Kamáres technique was introduced at one sweep, without passing through the primitive stage presented at Knossos by the Early Minôan period.

The deep deposit in square G 3 yielded many fragments of a very thick polished brown ware, which, except for a few sherds in γ 22, was not found elsewhere. It was handmade, the clay being of a ruddy brown, and containing many particles of some white substance. The polished surface was of a rich chestnut-brown colour. The fragments seem to be of large dishes, but it was impossible to make up any shape. A big handle and one big lug were found. From its position it was clearly contemporaneous with Kamáres ware of the best technique. It shews the older unpainted style surviving for household purposes alongside of the newer painted style adopted for the finer vessels.

On the town site was found the spout of a handmade vase of grey clay, exactly like the one from Syros figured in Ἐφ. Ἀρχ. 1899, Pl. 9, No. 8.

2.—Kamáres Ware.

§ 3.—The distinguishing mark of this fabric, of which much has been found at Palaikastro, is, as is now well known, the method of covering the vase with a coat of black lustrous glaze-paint, and painting a design on this in matt colours, chiefly white, which is in the best period helped out by other colours, red or even yellow, the result being a fine polychrome effect. Characteristic also, though rare at Palaikastro, is the use of plastic decoration. Except for the handmade vases mentioned above, and a certain amount of plain domestic ware mainly from Patema, the vases from the cemeteries are all of this fabric. So also are those from the early deposits in the town, again with the natural exception of the rougher household vessels.

In a degenerate form it is also found in the later houses, the older style lingering on for such small objects as cups. These later vases also have a thinner, poorer glaze, which is often rather red than black, and very carelessly applied, and do not often shew the characteristic white paint. Many of the flat handles of such cups were found in clearing out the streets. This practice of covering the whole vessel with black survives in fact until geometric times, when vases black all over except for a decorated panel reappear in considerable numbers. The Kamáres white paint, on the other hand, survived on more honoured vases to be an added beauty of the Cretan Mycenaean style.

These vases fall under three of the four main classes under which Dr. Mackenzie[1] has classified the fine ware of the 'Middle Minôan' period: cups, spouted jugs of different kinds, amongst which are the holemouthed vases with bridged spouts, and, rarely, 'fruit-stands.'

§ 4.—Here, as elsewhere, cups of various types form the great majority of the vases found. So common are they that it is possible by their means to get at some chronological classification of this fabric, and to shew how its later forms were taken up by the potters of the succeeding Mycenaean period. These cups, then, fall into two groups, according as they are found in the cemeteries and early town deposits, or occur in the later town houses. Any exclusive characteristics of either group will naturally form a criterion of earliness or lateness respectively which may be applied elsewhere. The groups are as follows:—

A. The shapes shewn in Fig. 1, and numbered 1, 1 a, 2, 2 a, 3, 4, 5, 5 a. 1 a and 2 a are variants of 1 and 2; 5 a very often has a model of an animal on the bottom, a fancy peculiar, as far as I know, to the potters of Palaikastro. These shapes occur only in the cemeteries and in the lower deposits in the town. This establishes the earlier date of this group. Its absolute dating is indicated by certain Egyptian parallels. Thus 4 is a shape characteristic of XIIth dynasty alabaster vases, which, however, often have rims and lids. Shape 2 a without its handle appears among the XIIth dynasty pottery kindly shewn me at Benihasan by Mr. Garstang. The Egyptian parallels to the cups with an animal inside appear to have a wider range. Characteristic features of this group of shapes are these;—

(*a*) The use of red paint, which amongst the cups is practically confined to these shapes, hardly indeed going beyond 1, 4, and 5 a. This agrees with the evidence from Knossos (*J.H.S.* xxiii. p. 180), that the polychrome design tends to become monochrome, light design on a dark ground.

(*b*) The bases of these cups, when flat, as they with one or two exceptions always are, shew parallel striations, as if the cup had been separated from the clay still on the wheel by some straight cutting instrument. These parallel striations always appear, although sometimes

[1] 'Pottery of Knossos,' *J.H.S.* xxiii. p. 171.

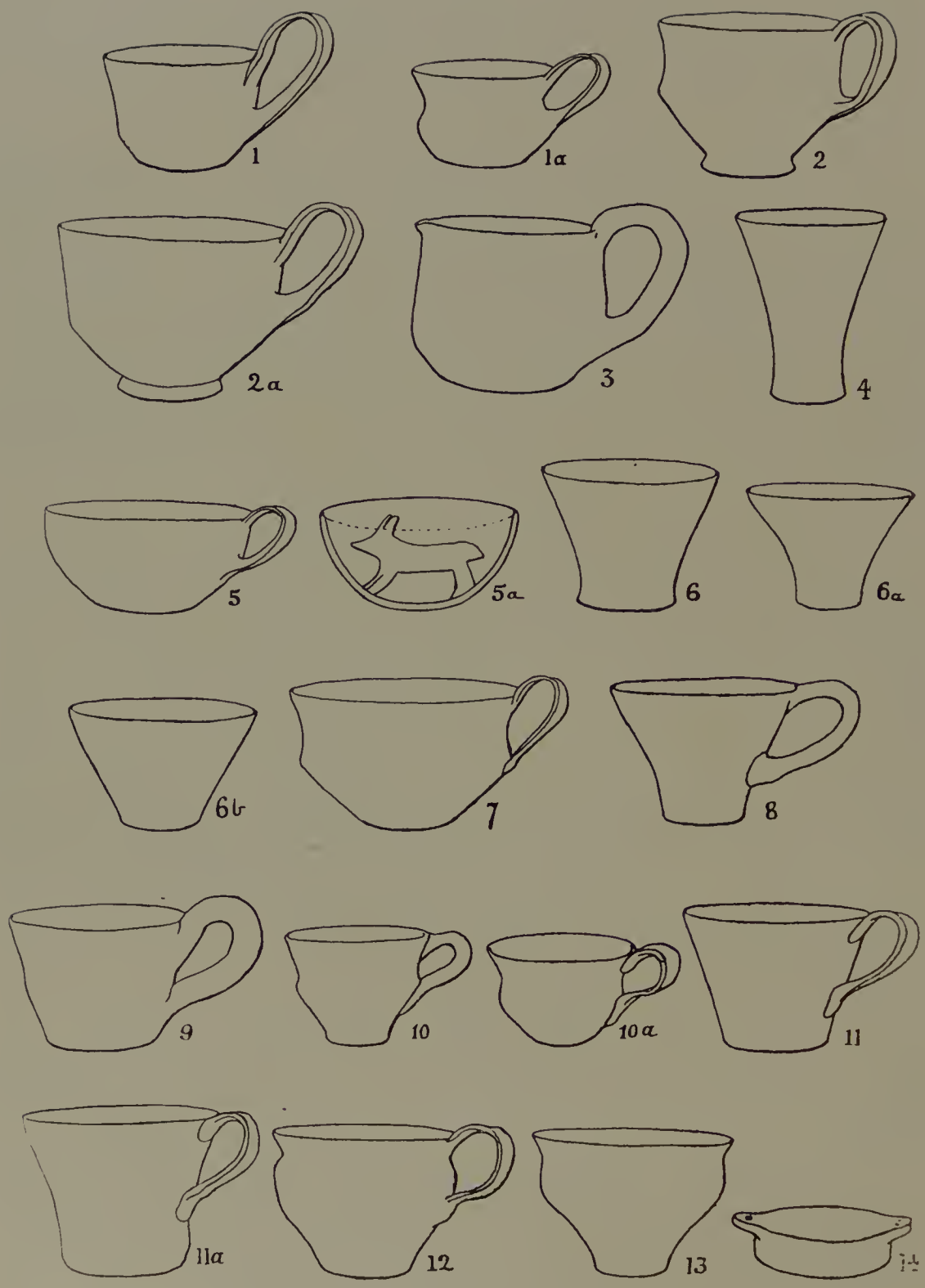


Fig. 1.—Forms of Kamáres Cups. (Scale 1 : 4.)

a little smoothed out, and, as they are never found in any vase from later deposits, may be regarded as an indication of an early date. Later vases with flat bases shew the curved concentric striations made by the use of a string to separate the freshly made cup. These markings are illustrated in 'Pottery from Zakro,' *J.H.S.* xxiii. p. 249, Fig. 2.

(*c*) The careful welding of the lower end of the handle into the side of the cup. Contrast Fig. 1, No. 11.

(*d*) The remarkable depth of shape 4 and the allied vase shewn in Fig. 2, also point to an early date. For this see 'Pottery of Knossos,' p. 166, and the vase shewn there in Fig. 1, No. 7, p. 167, which presents a

FIG. 2.—CUP FROM KAMÁRES CEMETERY.
(Scale 1 : 2.)

FIG. 3.—KAMÁRES CUPS.
(Scale 1 : 4.)

shape almost identical with that of the cup shewn here in Fig. 3, No. 1. Like that of the Knossian cup in question the base of the cup shewn here in Fig. 2 is not flat, but hollowed out like that of a wine bottle.

Cups of shapes varying between 6, 6 a, and 6 b, are very common in the cemeteries. The base generally has the straight, but not infrequently the concentric, striations of the later period. The shape in fact never disappeared, and is the parent of the common little Mycenaean unpainted cups, of which so many were found in the later houses, as indeed on all Mycenaean sites. These earlier Kamáres examples are, however, as at Knossos, of much finer workmanship. It is to be noted, however, that red

paint is not used in the decoration of these cups, which are in general quite plain.

B. The shapes of Fig. 1, numbered 7, 8, 9, 10, 11, 11 a, 12. Of these 11 and 11 a are cups of the Vaphio type, varying in the sharpness of the angle at the bottom. As a rule the earlier the cup the sharper and neater the angle. There is also a good deal of variation in the steepness and curve of the sides.

This group of forms is found not only in the cemeteries, but in the later houses as well, the commonest shape in these latter being 11 a, the coarser variety of the Vaphio type. This relative lateness is confirmed by

(*a*) The absence of red paint from their decoration, which is besides generally not so good in pattern.

(*b*) The striations on the base are never straight, but invariably of the concentric type produced by a string.

(*c*) The glaze-ground is commonly not so good, and is very frequently of a red colour.

(*d*) 12 is already a Mycenaean form. Without its handle it is exactly 13, which is a very common type of Mycenaean bowl, of which large numbers were found in, amongst other places, the filled-in bath-room in Block γ. No. 7 looks early, and no examples seem to have been found outside the cemetery, but the attachment of the handle and the invariably poor glaze are both signs of lateness.

§ 5.—How does this bear on the chronological relations between the town and the cemeteries? Of the early deposits in the town, those in Block *o* and β **40** are floor-deposits; those in γ **22** and outside the door of δ **47** are of the nature of filling, and a good deal confused; only that in G 3 presents the character of a regular undisturbed stratum of pottery that must have been formed continuously and have never been moved. From the prevalence in this stratum of vases of the types of Nos. 1 and 4 (Fig. 1), and the discovery there of a cup so typical of the earliest cemetery forms as the vase from which No. 2 (Fig. 1) has been drawn, and also from the absence of later types of Kamáres cups and still more of Mycenaean painted ware, one may conclude that this, the deepest and earliest deposit on the town-site, is contemporary with the earliest burials. The absence of cups of the second class (see Fig. 1, Nos. 7–12, and

description) from this deposit is additional evidence for the time-separation of the two classes of Kamáres cups.

FIG. 4.—KAMARES CUPS. (Scale 1 : 3.)

The cemeteries thus were in use when the town site was first settled, and continued to be used until after the introduction of new types of pottery, types which survived into the later period of the town's career,

FIG. 5.—KAMÁRES CUPS AND JUGS. (Scale about 1 : 4-5.)

when these cemeteries had gone out of use. From the occurrence in the cemetery at Patema of a few domestic vases of forms found in the later

town, it may be inferred that occasional burials—perhaps, from the plainness of the vases, burials of poor people—went on here later than in the other cemetery. But as domestic ware is likely to continue unaltered longer than more ornate fabrics, too much stress should not be laid on this. Had these cemeteries not gone out of use early, for prosperous people at all events, Mycenaean vases, which as it is are conspicuous by their absence, would have been found. The citizens of the Mycenaean period buried their dead in λάρνακες.

The decoration of these cups is often extremely pretty. Specimens of them together with a few other small vases of miscellaneous shapes have been published in last year's report, Figs. 7, 9, 10, and 17, and others are shewn here in Fig. 4 and Fig. 5, *a*, *b*, *c*, *d*. The hatching indicates red paint, the white white paint, and the black shews the ground of black glaze-paint. With the exception of the leaves in Fig. 4, No. 3, no naturalistic patterns occur ; all are strictly conventional. The festoon and the single-coil spiral are very characteristic. The running spiral of Fig. 5, *d*, is very rare ; not that running spirals in white paint are not common enough, but they occur almost always on vases painted when the Mycenaean style had come to the fore, and the use of white was preserved as a survival of the older style.

§ 6.—The Kamáres beaked jugs were all of the form shewn in Fig. 22, No. 2. All were ornamented with white stripes, generally vertical

Fig. 6.—Kamáres 'Hole-mouthed' Jar. (Scale 1 : 3.)

on the body, surrounding the neck like a collar, and again repeated under the spout (Fig. 5, *e–h*). Six of these were found. The other

beaked jugs will be discussed below in the section on domestic pottery.

Here, as generally in Crete, there are two forms of hole-mouthed Kamáres vases with bridged spouts. One is that shewn in Fig. 6, with two handles and the body tapering downwards to a foot; the other is the type with one vertical handle opposite the spout, shewn in Fig. 7, No. 2. Fig. 7, No. 1 shews the form that is probably the ancestor of these vases. It was among the very early vases found on the gravel ridge. The clay is red, and the surface polished and not painted. It is handmade. Besides these points, the antiquity of the form is also attested by its appearance amongst the Early Minôan vases from Knossos (see 'Pottery of Knossos,' Fig. 1, Nos. 8, 10, 12), and a vase with a similar spout has been found among the Cycladic ware from Syros ('Εφ. 'Αρχ. 1899, Pl. 9, No. 14). A

FIG. 7.—EARLY SPOUTED JUGS. (Scale 1 : 2.)

fine Kamáres vase from H. Triádha near Phaistos, to which I am allowed to refer by the kind permission of Professor Halbherr, supplies the connecting link. Similar in all other respects to the vases shewn in Fig. 7, Nos. 1 and 2, it has a spout that is exactly half-way between them. Since this parent-form is of the one-handled type, it is likely that this is the older of the two. Developing a neck it survived as the form shewn in Fig. 12, though as a hole-mouthed vase it was long outlived by the type with two horizontal handles, which lasted as a common form well into the Mycenaean age. Also an example of the one-handled type from the cemetery had a fine, though much ruined, decoration of white and red. It sometimes has a foot: probably the footless form is the older.

§ 7.—Of 'fruit-stands' γ **22** yielded one stem, with much perished white paint, and one splendid complete example (Fig. 8), a beautiful

specimen of red and white Kamáres painting. A broken stem of such a vase also came from β 40.

Fig. 8.—Kamáres 'Fruit-stand.' (Scale 1 : 2.)

Before passing on it should be added that two plain black fragments of very thin eggshell Kamáres ware were found in γ 22, which also yielded a few fragments of the ware with plastic decoration.

3.—MYCENAEAN PAINTED WARE.

§ 8.—This section and the following on the household pottery comprise, with the exception of the few degenerate Kamáres forms, all the vases from the later town, and from the sites mentioned above under the fifth heading. This amounts to at least five-sixths of the total pottery found.

The painted Mycenaean ware ranges from that of the best period to that of the period of decline, which in Crete leads by gradual steps to the fully developed geometric style. That painted vases of varying date should be found together, or at least in the same town, is not surprising, for such objects would be of considerable value, and so be carefully preserved. Thus, whilst very many of the vases were of the decadent period, the finds of vases shewing the Mycenaean technique at its best were numerous and important. That the floor-deposits however do not go back to a very early date in the Mycenaean period is shewn by the scarcity of the ripple-motive ('Pottery of Knossos,' p. 160), which from its origin must be regarded as a characteristically early Mycenaean pattern. No whole vases shewing this were found; it occurred on a good many fragments from the well in β **4** (*B.S.A.* viii. p. 311). In strong contrast to this is the frequency of this ripple-motive on the Mycenaean ware which was found mixed up with clearly contemporaneous Kamáres cups in the pits at Zakro ('Pottery from Zakro,' *J.H.S.* xxiii. p. 25). Thus, whilst the pottery from the Zakro houses is contemporary with that of the Roussolakkos floor-deposits of β **1–22**, δ **4** and δ **18**, that from the pits exhibits an earlier stage which is as yet but slightly represented at Palaikastro. (See however the account on p. 284 above of the earlier stratum in β **10** and **13**.)

§ 9.—A cylindrical vase with a perforated star on each side, and a pair of horizontal handles near the rim, may however be regarded as belonging to a slightly earlier period than the deposits in β **1–22** and δ **4** (excluding lower *strata* in β **10–13**). It belongs to the early Mycenaean period when the Kamáres technique of light on dark was being thrust into the background by the development of its dark-on-light Mycenaean rival, if one may judge from its bearing a certain resemblance both in

shape and naturalistic style of decoration to the beautiful lily vase figured in 'Pottery of Knossos,' p. 189, Fig. 8. The ground is a rich red; the decoration consists of a bull's head on each side, between whose horns a double axe is suspended, whilst from between the perforations spring branches of star-shaped flowers. It is the natural treatment of these flowers in pure white that so strongly recalls the Knossian vase above cited. Its fragments were found in clearing out the large megaron (18) of the earlier house in Block δ. A very similar vase was found in 1902 amongst the pottery in β 10. Its decoration was much ruined. It is shewn in *B.S.A.* viii. Pl. XVII. No. 5.

§ 10.—Of the best Mycenaean period the finest vases were the group of fillers, which are mentioned above as having been found in δ 4. In all, there were 17 of these, of which 13 can be almost completely made up. They are of two shapes. One is conical with a large, bold handle (Fig. 9); this is the shape of the vase carried by the cup-bearer of Knossos. The other (Fig. 10) is pear-shaped, with a narrow neck, small handle, and projecting lip. Of exactly the same shape is the filler, from Zakro, published by Mr. Hogarth, *J.H.S.* xxii. p. 333, and Pl. XII. The technique also is identical. This shape is everywhere much rarer than the conical type, which has been found at Gournià in considerable numbers, and has occurred in stone at Knossos and H. Triádha. All are covered with a fine ruddy yellow slip, and decorated with a lustrous paint that varies from red to black. They are in all cases pierced at the bottom.[1]

The pear-shaped fillers are, as Mr. Bosanquet has pointed out[2] in connexion with the Zakro vase, very closely akin to the Keftiu shape, from the Rekhmara tomb, figured by W. Max Müller, *Asien und Europa*, p. 340. The nipple at the bottom of the Keftiu vase points very decidedly to its having been pierced. A pierced filler from Phylakopi has a similar though smaller nipple.

The motives of the decoration are either conventional or marine, and there is a tendency for the vases to go in pairs. Of the conical fillers,

[1] In publishing the filler from Zakro referred to above, Mr. Hogarth has inadvertently stated that it was not pierced at the bottom. As the vase stands now in the Candia Museum the bottom is supplied in plaster. These examples from Palaikastro and others leave no doubt that the Zakro vase also was pierced.

[2] 'Archaeology in Greece,' 1900–1, *J.H.S.* xxi. p. 339.

five shew characteristically Mycenaean conventional designs, one pair (Fig. 9) having a beautiful pattern of festoons looped up with triple pendants

FIG. 9. (Scale 1 : 3.)

FIG. 10. (Scale 1 : 3.)

MYCENAEAN FILLERS.

This splendid design occurs also on a hole-mouthed jar from Phaistos, whilst other parallels come from Mycenae[1] ('Pottery of Knossos,' p. 192) and

[1] [The upper part of the restored design *J.H.S.* xxiii. 192 represents the neck of an amphora found by Professor Tsountas in a tomb at Mycenae, along with a more complete one, also restored by Messrs. Marshall and Bagge. The pattern may be derived from a necklace; similar forms appear among the glass-paste ornaments from Mycenae.—R. C. B.]

Phylakopi. Another bears the double axe, with its blades cusped, as if one axe were seen behind another. The design is completed by large rayed stars and shells. The large number of actual triton-shells found, to be used doubtless as trumpets, a practice illustrated on a gem from the Idaean cave (*J.H.S.* xxi. p. 142, Fig. 25), and by the modern Cretan ἀγροφύλακες, points to these shells being tritons, rather than murex-shells. At the same time, the finding of murex-shells on Kouphonisi points the other way. Certainty can hardly be reached: perhaps the artist himself hardly knew. Of the other complete examples, two are entirely marine in design and are covered with murex-shells amongst long fronds of seaweed which spring from conventionally indicated rockwork. Two more, of which only the top halves survive, have the same stars, alga, and rockwork. A lower half, which probably belongs to one of these, shews stars and murex-shells.

Of the pear-shaped type, one, unfortunately not all preserved, has the rayed star, shells, and long seaweed fronds. This vase must have been almost a pair to the filler from Zakro cited above, which however has not the long swaying fronds of seaweed, which are so graceful a feature in the Palaikastro design. A complete filler of this type is covered with a close pattern of nautilus shells and rockwork; the remaining four are decorated with a large octopus whose body occupies one side of the vase, whilst his straggling feelers are arranged to cover the rest of the field. The necks of these octopus fillers are decorated with the other marine motives. Three other fillers in fragments, but of much coarser make, come from Block γ. Two have the decoration disposed in bands, like the fillers from Gournià.

§ 11.—β 22, the little room under the stairs in Block β, yielded some fine painted vases. Two had been packed away in big jars which stood around the walls. The good vases were two tall beaked jugs, one of which is shewn in Fig. 11, with a pattern of spiral tendrils round the body, a more florid descendant of the tendril pattern on the Zakro bowls (*J.H.S.* xxiii. p. 249, Figs. 1 and 3); a four-handled pyxis, a gourd-shaped vase decorated with an octopus and shells on both sides, and a pear-shaped vase with papyrus painted on it. Both of those were of cold greenish-grey clay and slip and very black paint. The mouth of the papyrus vase is closed by a strainer. The size of the bow of the handle, and the way its lower end curves away again

from the body of the vase, are characteristic of these very fine vases, when the potter's mastery over his material was complete. A three-handled pithos from Thorikos, figured in 'Εφ. 'Αρχ. 1895, Pl. XI. 1, is decorated with a very similar papyrus plant. The gourd-shaped vase painted with an octopus is clearly contemporary with the fillers, and thus the greenish-grey slip and very black paint go with the warm yellow slip and reddish-

FIG. 11.—MYCENAEAN SPOUTED JUG. (Scale 1 : 3.)

brown paint. The difference appears to result simply from the manner of firing. Other vases with this greyish slip and black paint are the three-handled pseudamphora reproduced in last year's report (*B.S.A.* viii. p. 313) and a large jug with a long bridge spout (p. 285, Fig. 5) from the earlier stratum in β **10**. In these two vases the decoration is more conventional; the fronds of alga, that spring from the rockwork at the bottom of the decorated field on the beaked jug, end in a similar way at the top under

the neck. The natural scheme is thus conventionalised so as to look alike from above and from below. This happens not unfrequently, and this particular alga design degenerated along this line. Among the fine marine vases a fragment shewing a nautilus shell and rockwork must not be passed over. The lines left by the wheel on the inside go in such a direction that it seems probable that this belonged to a large vase with spiral stripes of decoration, like the fine vase from Vaphio, a restoration of which, together with this fragment, is to be published by Mr. Bosanquet.

§ 12.—The other painted vases of the fine Mycenaean period fall under the following headings :—

I. Strainers of the form shewn in the last report, *B.S.A.* viii. Fig. 22, No. 14.

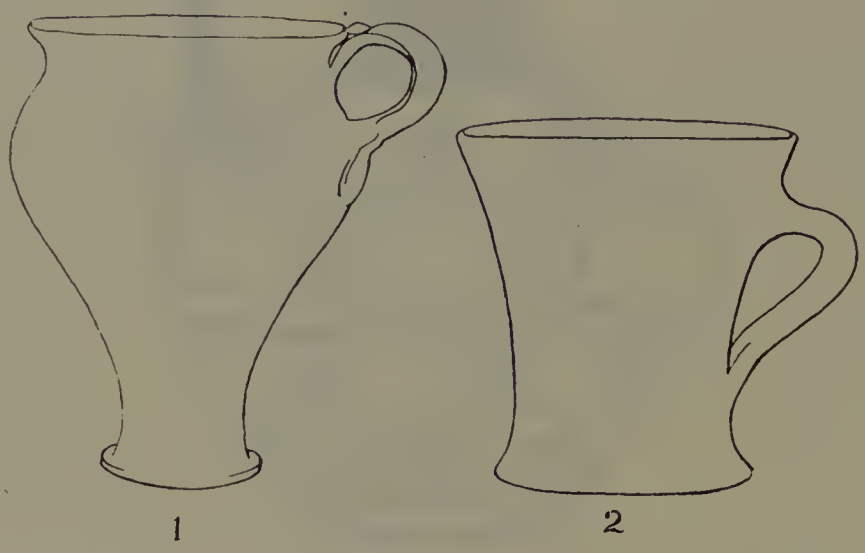


FIG. 12.—MYCENAEAN TANKARDS. 1. an early, 2. a late form. (Scale 1 : 4.)

II. Vases of the shape shewn in Fig. 12, No. 1. This kind of vase always has a small hole in its bottom. It is a type that often occurs in Cretan Mycenaean ware ; examples have been published from Knossos (*B.S.A.* vi. p. 78, Fig. 23) and from Zakro (*J.H.S.* xxiii. p. 253, Fig. 17). A similar vase, though somewhat more squat, was found at Phylakopi.

III. Painted bowls, with and without handles (Fig. 13). Of these large numbers were found. As in the numerous examples from Zakro, a small boss of clay is often set in the angle where the strap-shaped handle joins the rim.

§ 13.—The marked character of the pottery found in the filled-up bath-room in Block γ, and the position in which it was found, make it necessary to treat it as a special group by itself. Although its use as

FIG. 13.—PAINTED BOWL WITH SPIRAL PATTERN.

packing, when the stairs were built, clearly puts it in an earlier period than that of the final desertion of the houses, it nevertheless shews marks of the decadence of the fine style.

The characteristics of this stage of Mycenaean pottery are these. As to shape we notice (*a*) that the pseudamphora is already frequent, and that

FIG. 14.—VASES FROM THE BATH-ROOM IN BLOCK γ. (Scale 1 : 4.)

as a large storage vessel. One top found measured ·16 m. across the handles. (*b*) The stalked, usually two-handled, Mycenaean kylix appears (Fig. 14, No. 1, and F. and L. *Myk. Vas.* Pl. xliv. 83–86). (*c*) Bowls of a

characteristic shape (Fig. 14, No. 2) are extremely frequent. Fig. 28 shews other forms present.

As to decoration, we see from the kylix shewn in Fig. 14 that the linear style of later Mycenaean times is beginning. But the most noticeable feature is the slightly mechanical scheme of decoration, in which the field is parcelled out by a rigidly disposed system of lines and thickly covered with patterns, very commonly with rows of leaves set closely

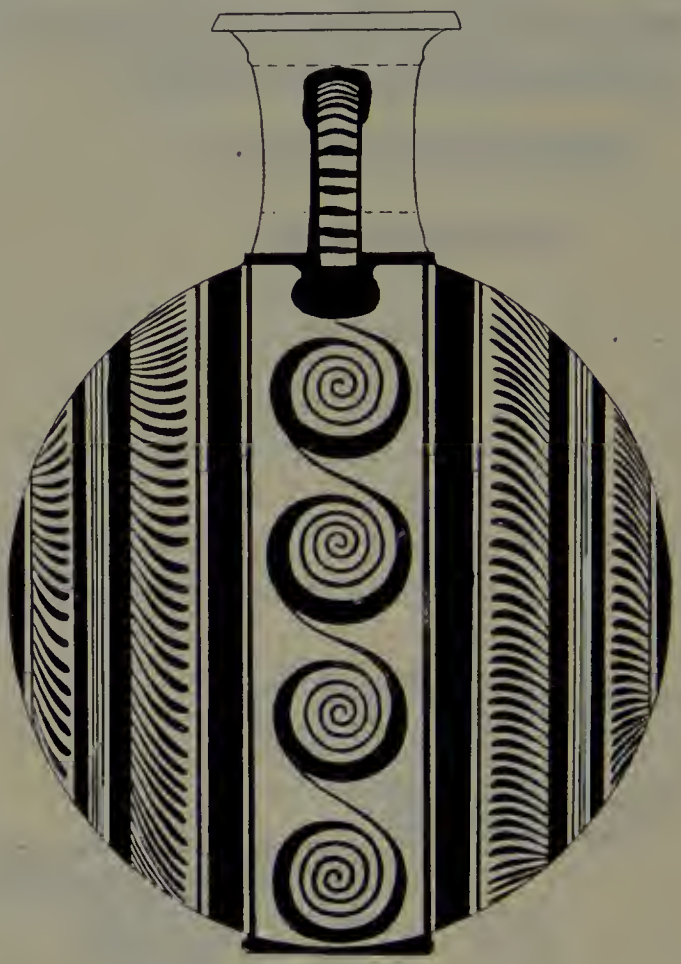


FIG. 15.—VASE FROM BATH-ROOM IN BLOCK γ. (Scale 1 : 3.)

together. The effect is rich, though the stiffness and absence of freedom in the drawing place these vases considerably below the achievements of the finest period. Two globular vases in this style were found, one of which is shewn in Fig. 15. The row of spirals and the concentric rings on this vase give it a very close resemblance to a fragment of a vase of the same shape and technique found in the waste-heaps of the Palace of

Khuenaten at Tell-el-Amarna. The Egyptian example, which is to be dated to about 1400 B.C., is however, to judge from the carelessness of its style, probably somewhat later. In none of the vases of this class does the degenerate polyp or the metopic division of the field yet appear.

Leaf patterns in this close style occur also on the two vases shewn in Fig. 16, which were found near the painted *larnax* described in *B.S.A.*

FIG. 16.—MYCENAEAN VASES IN THE 'CLOSE' STYLE. (Scale 1 : 3.)

viii. p. 297. The handle springing from the neck of No. 1, and the shape of No. 2, anticipate the coming geometrical style. The shape of the latter occurs at Zakro amongst fully developed geometric pottery. All this pottery, together with the *larnax*, must be grouped together as giving a picture of the art of Palaikastro, when it was still good, but beginning to decline. The quatrefoil which occurs on the *larnax* is a common ornament on late vases.

§ 14.—We now come to certain late floor-deposits which represent the pottery of the period of final abandonment. Here the vases in γ 9 figure

largely. Among these vases it is to be noticed that the pseudamphora is common. It is generally a big pear-shaped vessel often decorated with the degenerate polyp ornament, which in its later forms is no more than a waved line. Besides the complete examples found, the numerous tops of these vessels found in clearing the streets testified to its commonness. The tankard-shaped mug (Fig. 12, No. 2 from γ 9) is also a characteristically late form, as is shewn both by the company in which it is found, and also by the patterns found on it. Thus we have an example here of a similar form with a frieze of birds (Fig. 17), and the fine example from Psychro

Fig. 17.—Mug with Frieze of Birds.

(*B.S.A.* vi. p. 103, Figs. 31, 32) has on one side the chequer pattern, and on the other side a polyp, which has strayed so far from nature as to have its feelers ending in tailed spirals. It occurs also in the period of the re-occupation of the Palace of Knossos.

The big amphora shewn in Fig. 18 also came from γ 9. Its muddled scheme of ornament, pale grey slip and dull glaze-paint in themselves suggest degeneration. The scheme of ornament shews prominently the principle of dividing the field into panels that plays so great a part in geometrical vase painting. These panels are filled with the carelessly drawn degenerate remains of the patterns of a better period all jumbled together, no one part of the design bearing any relation to the others. A large pithos has this kind of decoration on one side and the wavy lines of the degenerate polyp on the other.

The vases from the beehive-tomb excavated in 1902 belong to this period. They comprise a bowl resembling those from the bath-room both

FIG. 18.—LATE MYCENAEAN AMPHORA. (Scale 1 : 6.)

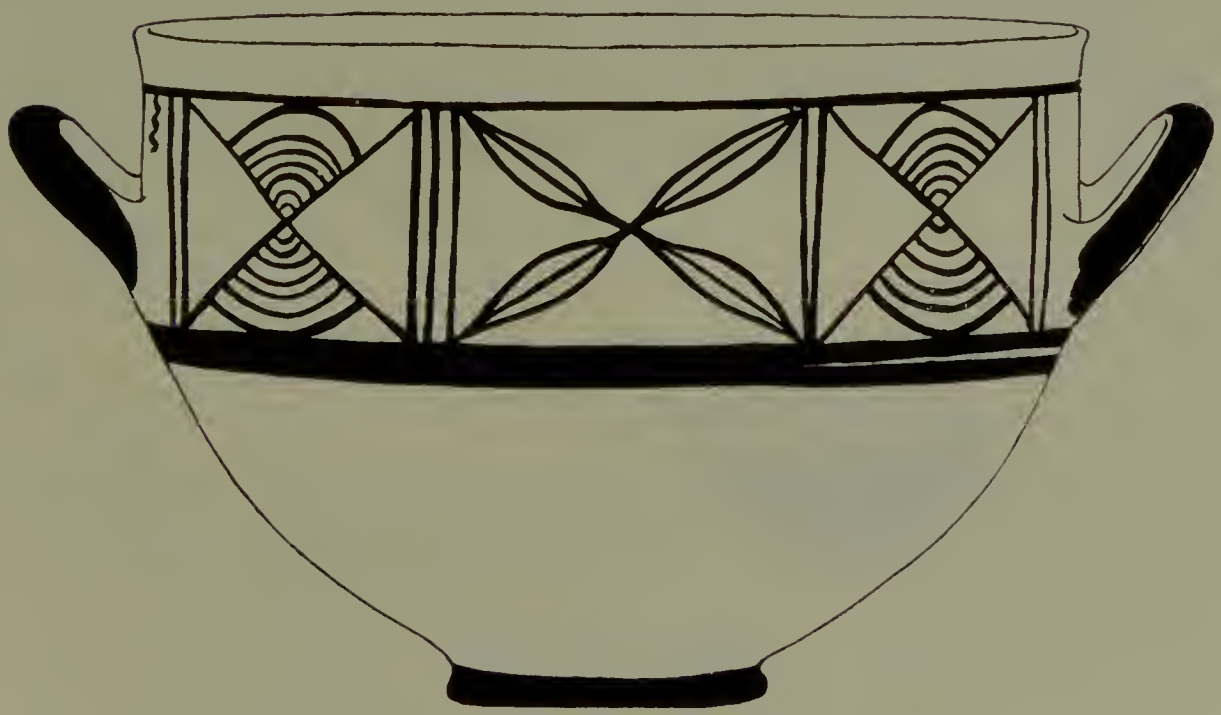


FIG. 19.—TWO-HANDLED BOWL FROM KOURAMÉNOS.

in form and decoration, but of less careful make, and three large pear-shaped Bügelkannen. One of these is decorated on the shoulder with

conventionalised birds, and on the body with the waving arms of a degenerate polyp or octopus; another is painted with stripes on the body and a decadent ornament above. The late shape of a bronze sword found with the vases confirms their evidence. The very flat Bügelkanne found in this tomb (*B.S.A.* viii. p. 303, Fig. 19) is, to judge from the clear, clean appearance of its slip and paint, probably an importation.

Here also belongs a two-handled bowl (Fig. 19) from Kouraménos. Its grey slip is covered with a linear design in black, that, together with the metopic divisions, contains the quatrefoil motive which is common in this style, and noticed above as occurring on the painted *larnax*. The amphora shewn above in Fig. 18 has it, though it only partly appears in the drawing. Of the same shape and still more geometric style of decorations is the bowl from Kastri figured in last year's report (Fig. 2, p. 289). The shape of these two bowls is in fact almost the same as that of the big geometric vases that have been found containing burnt bones. The decoration of the Kastri bowl can be paralleled by that of an unpublished vase from the transitional necropolis of Koures.

§ 15.—Of fully geometric style are the seven similar vases (Fig. 20, No. 2) that were found together, near the surface, over the south-east end of the main street. They are of a softish grey clay, covered all over with a hardly lustrous black paint. So too, except for the band of pattern, is the one-handled

Fig. 20.—Vases of Geometric Period. (1 : 4).

bowl (Fig. 20, No. 1) found above the courtyard of Block *P*. This, with its characteristic fret pattern, is the most advanced geometric vase that has yet been found at Palaikastro.

4.—DOMESTIC WARE.

§ 16.—Under this head falls all the plain unpainted pottery, which, as is natural in an inhabited site, formed the larger part of the total pottery found. With it come the plain beaked jugs from the cemeteries. Especially large finds of this class of pottery came from **β 10** and **β 13** which gave specimens of most of the forms (*B.S.A.* viii. p. 314).

The main classes are these:

I. Jugs.—The shapes found enable us to trace the development of the later forms of jug from the 'Schnabelkanne' proper, which served for this purpose in the early period of the cemeteries. A series of typical examples is shewn in Fig. 21. No. 1 is from the big bone-enclosure. 2 is one of the Kamáres beaked jugs with white stripes, mentioned above as having been found both in the large cemetery and in the early town-deposits. From its fineness it is perhaps later than 1. This shape is the germ of the later jugs. 3 shews a form with the mouth already widened. 4, also from the big cemetery, though above like 1 and 2, has in its lower part assumed the form of the later jugs. This shape survived, and a fine example in Mycenaean technique was found in the bath-room in Block β. At this point the series bifurcates, according to the treatment of the mouth. On the one hand the mouth widens, as in 3, and we get 5, a vase whose lateness is shewn by its having been found in Block ε, and its decoration in a degenerate Kamáres style with a Mycenaean running spiral. It also has the marks of a string on its base. A further widening of the mouth gives us 6, a form common in the houses.

On the other line of development, the mouth is not so much widened as pinched on both sides into a trefoil shape, the neck remaining narrow, and the small lobe of the trefoil forming the spout. This, by way of 7, a vase from the cemetery, but whose comparative lateness is indicated by its string-marked base, leads to 8, which is perhaps the commonest form of jug found in the houses. Specially large numbers of them were found in **β 10** and **β 13**.

A similar series is shewn by the shapes 9, 10, 11. The askos-like jug, itself a form whose earliness is clear, passes by way of 10, the original of which is from the burials on the gravel ridge, into the little pots, one of

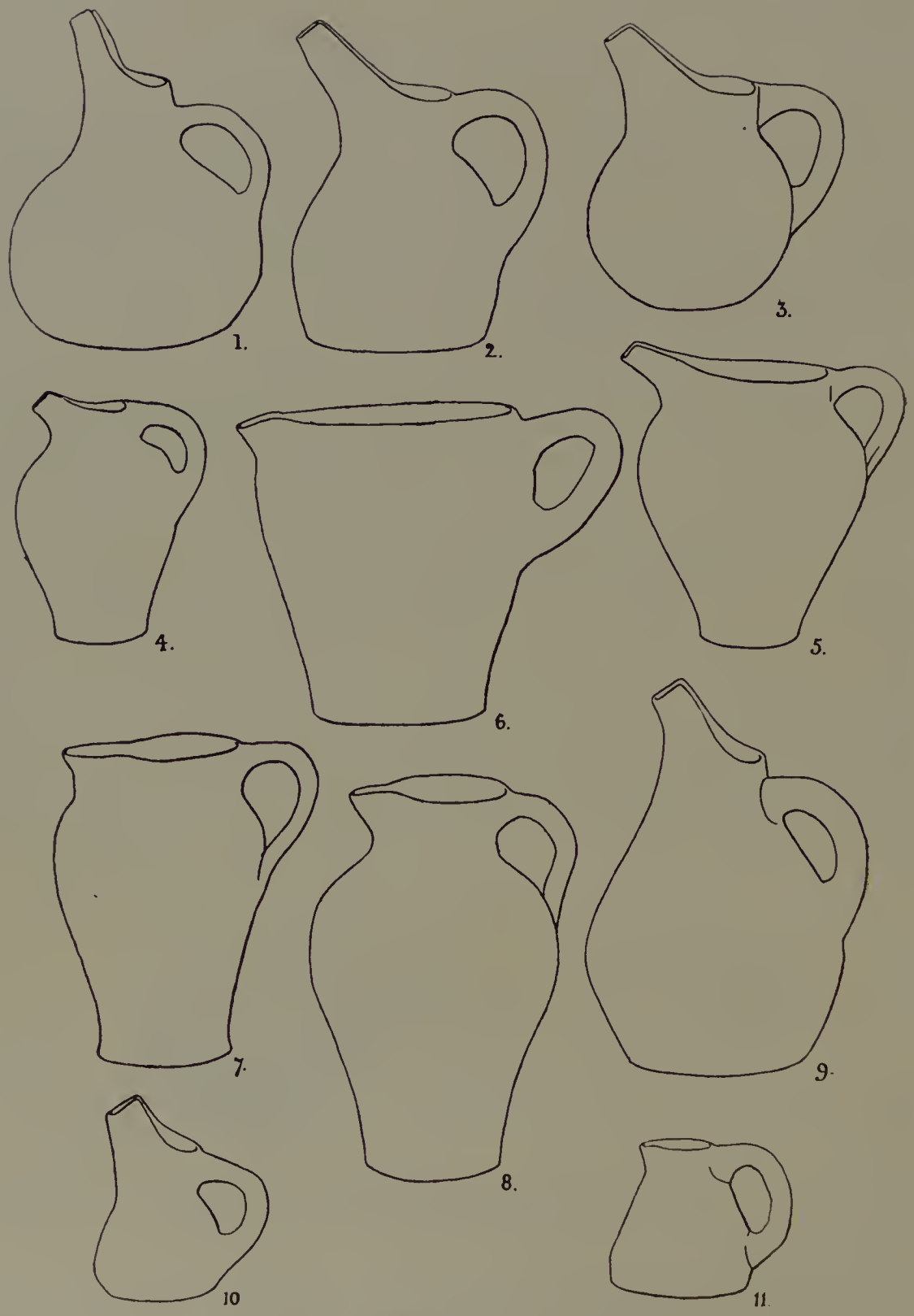


FIG. 21.—PLAIN JUGS. (Scale 1 : 4.)

which, from Patema, is shewn in 11. The building *o* yielded sixteen of these little pots. Their earliness is in general well shewn by the company in which they have been found. They occur in the early deposit on the gravel ridge, in company with the little vase shewn in Fig. 22, No. 1, and others of the early cemetery types (*e.g.* Fig. 22, No. 4). This first vase (Fig. 22, No. 1), with its neck decorated by oblique cuts, is identical with several recently found by Mr. Xanthoudides in a Mycenaean house near Chamézi, in the eparchy of Siteia, whose earliness is vouched for by its other pottery and by the smallness of the stone vessels found. Small beaked jugs from the cemetery are shewn in Fig. 22, Nos. 2, 3, 4. See also first report, Figs. 4 and 7.

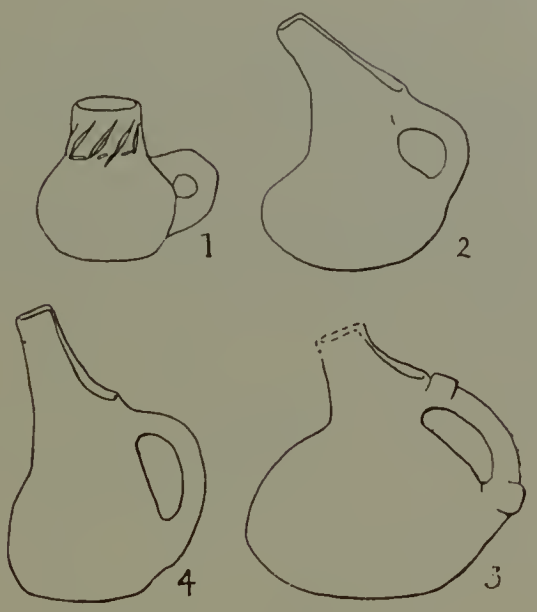


FIG. 22.—SMALL PLAIN JUGS. (Scale 1 : 4.)

11. Scoops (Fig. 24, No. 3).—These are the most graceful of the house-

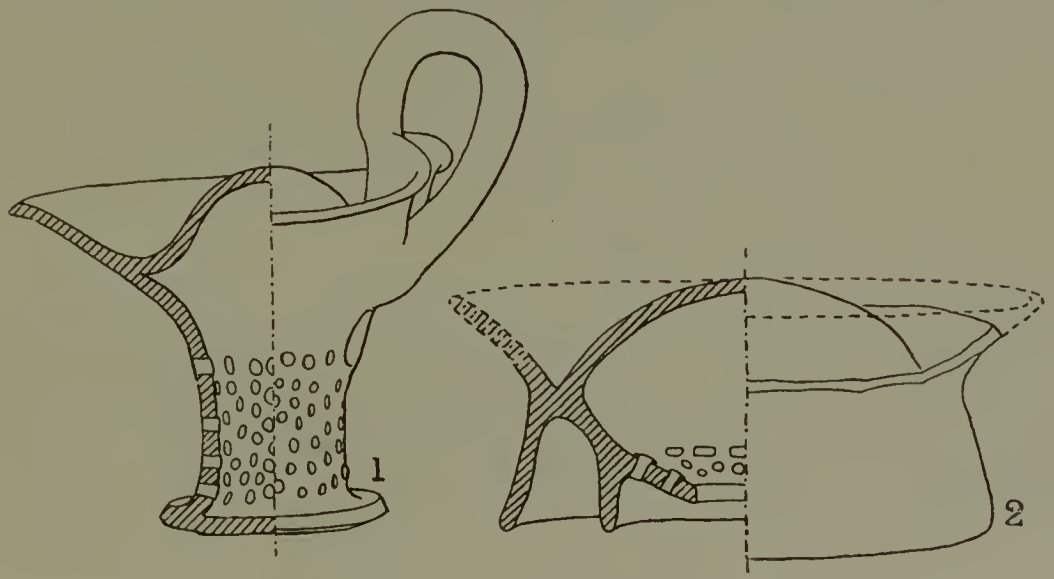


FIG. 23.—CLAY FIRE-BOXES. (Scale 1 : 4.)

hold pottery, and give a very high idea of the deftness of the Palaikastro potters. Fig. 23, No. 1, shews a scoop combined with one of the fire-boxes of

class III. The more usual type with a bowl and straight handle also occurs.

III. Fire-boxes.—Under this head are placed the variety of vessels whose characteristic feature is a box, domed on the top side, and below pierced with a number of small holes and one large one. Above the vessel spreads out to form a dish, with the domed top of the box protruding like a boss in the middle. All Cretan Mycenaean sites yield them in very varying forms. Shapes found here are shewn in Fig. 23, No. 1 and No. 2. The box part frequently shews signs of burning. Filled with

FIG. 24.—UNPAINTED CLAY VESSELS. (Nos. 1, 2, 3, Scale 1 : 4. No. 4, Scale 1 : 8.)

charcoal, which could be prevented from falling out by stopping the big hole with clay, air being supplied through the smaller holes, these vessels would serve the purpose of the modern hot-water plate. For similar vessels from Zakro see *J.H.S.* xxiii. p. 258, Figs. 34, 35. The shape shewn in Fig. 34 occurs also at Palaikastro. An example from Phylakopi is shewn in *Phylakopi*, p. 211, Fig. 26.

IV. Dishes with one handle standing on three legs (Fig. 24, No. 2).—Innumerable fragments of this kind of dish were found, but no specimen

with the legs not gone. The central part of the plate is always roughened by indentations arranged in a pattern of radiating lines. In a few instances rough stripes of white paint are added.

V. Tripod cooking pots with either one or two handles.—The legs of these and of the dishes of class IV. form a considerable part of the fragments found in the rooms and streets.

VI. The little handleless cups, mentioned above as descendants of the Kamáres cup shewn in Fig. 1, Nos. 5, 6, 6*a*, 6*b*.—Of these enormous deposits occurred in the houses.

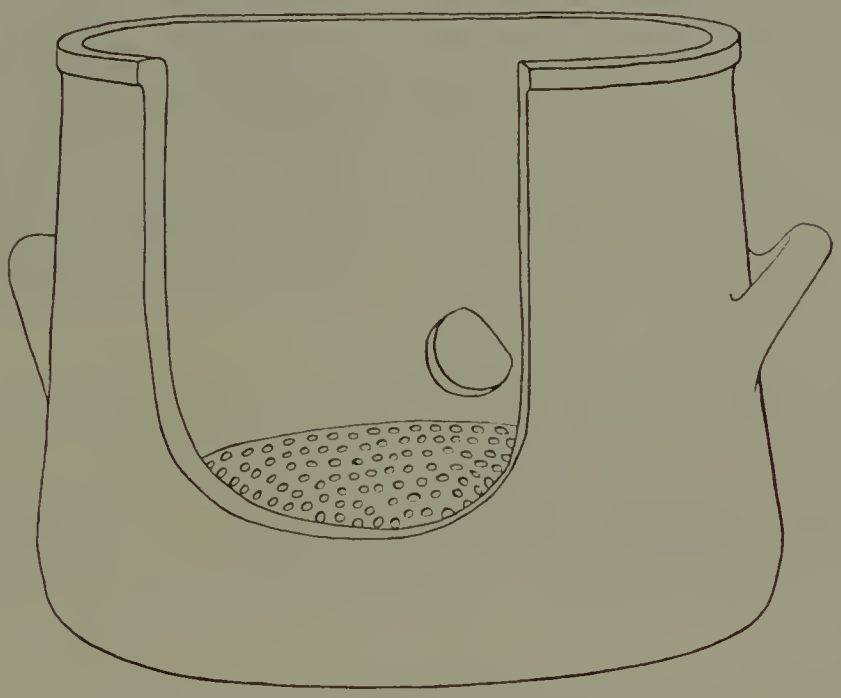


FIG. 25.—CLAY BREAD-PAN. (Scale 1 : 4.)

VII. Amphorae with the mouth pinched into two spouts between handles set high on the shoulders of the vase (*B.S.A.* viii. p. 309, Fig. 22, No. 9).—Of these seven were found in β **13**. The shape descends from a Kamáres prototype.

VIII. Calathos-like vases, of which the largest was found in β **13**.—With these may go the vase shewn in Fig. 24, No. 1; except for the hole it is like the Zakro vase figured in *J.H.S.* xxiii. p. 258, Fig. 33.

IX. Large vessels with bridged spouts (p. 282, Fig. 3, No. 23).

X. A pan for baking bread, Fig. 25.—Cf. a similar vessel from Tiryns, Schliemann's 'Tiryns,' p. 116.

XI. Two clay pricket candlesticks.—These were found on the gravel ridge east of the main town, near the early burials (Fig. 26).

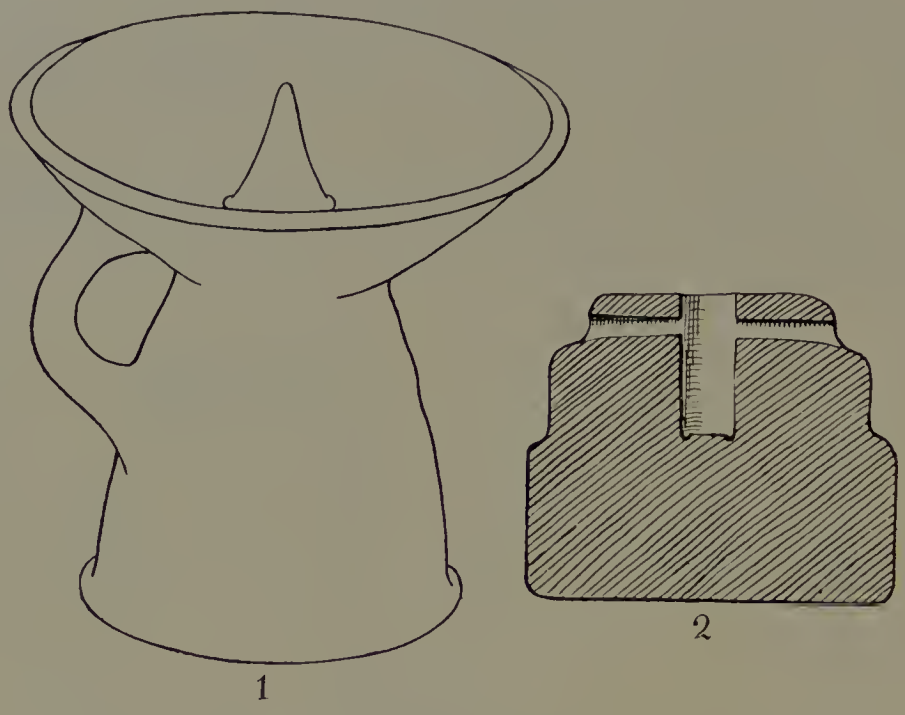


FIG. 26.—PRICKET CANDLESTICK AND STEPPED PLINTH FOR DOUBLE AXE.

XII. Clay tripod-stands, probably for lamps.—A complete example was found in 1902, in β **13**. This year fragments of four more were found (Fig. 28, No. 2).

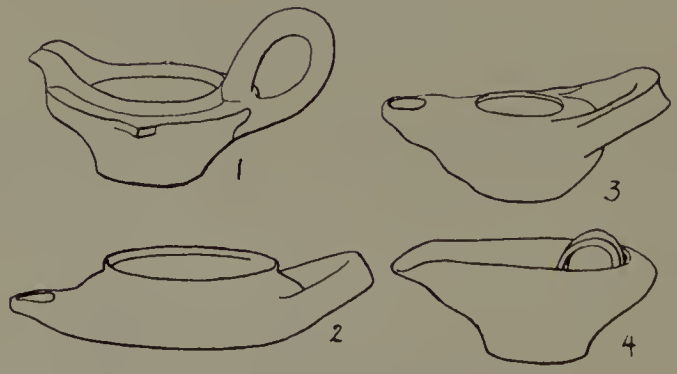


FIG. 27.—CLAY LAMPS. (Scale 1 : 4)

XIII. Plates and dishes.

XIV. The four vases from the passage between ε **10** and **11** (Fig. 24, No. 4).—They are of roughish clay, covered with a pale slip. The only

decoration consists of two broad bands across the top of the body. They are so top-heavy that in use they must have stood in some kind of carrier, or had their feet buried. They either have two opposite horizontal handles at the greatest circumference, or one set vertically by the mouth.

XV. The so-called spitrests.—These are wedge-shaped bars of clay, with the sharp angle notched as if for supporting the end of a spit. For illustrations see *Phylakopi*, p. 212, Fig. 27.

XVI. Certain tall tubular vessels with small handles, like umbrella-stands without bottoms.

XVII. Ladles with hemispherical bowls and long loop-like handles.

XVIII. Small one-handled vases of the shape shewn in *J.H.S.* xxiii. p. 250, Fig. 11.—These were very common.

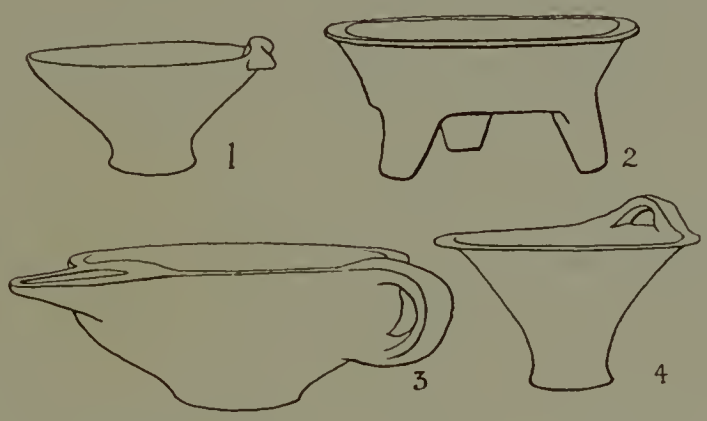


FIG. 28.—VASES FROM BATH-ROOM IN BLOCK γ. (Scale 1 : 4.)

XIX. Clay lamps.—These were of three types. (*a*) The earliest and by far the commonest form is the unbridged lamp shewn in Fig. 27, No. 1. Of these many were found in the Mycenaean houses at Zakro and elsewhere, and it may be regarded as the typical form of the Mycenaean clay lamp. (*b*) The more developed form with a bridged spout is rarer (Fig. 27, Nos. 2, 3). It occurs occasionally with the other type at Zakro [1] also, but in the early Mycenaean house referred to above at Chamézi only the older unbridged type has been found. (*c*) Cup-shaped lamps standing on a high stalk. Besides these genuinely fictile forms, clay imitations of the typical two-wicked stone lamp are occasionally found. A fine example

[1] *B.S.A.* vii. p. 128, Fig. 41 shews a bridged lamp, which however had the handle of the earlier unbridged type. Bridged lamps with horizontal handles like those at Palaikastro were however found in Mycenaean deposits at Zakro.

occurred with the pricket-candlestick mentioned above. Also the vase shewn in Fig. 27, No. 4, is probably a lamp. Perhaps the tendency of the outside handle to get broken off suggested to some ingenious potter the idea of putting it where it would be safe inside the bowl. The handle of these vessels, of which several have been found, generally rises above the level of the lip of the cup, so that one could use it without touching the oil. They have been found also at Psychro and Zakro (*J.H.S.* xxiii. p. 250, Fig. 13).

R. M. DAWKINS.

EXCAVATIONS AT PALAIKASTRO. II.

§ 9.—Kouraménos.

In consequence of the torrential rains which made it impossible to commence work on the Roussolakkos site immediately upon our arrival at Palaikastro, an excavation was carried on from March 23rd to March 28th at a site named Kouraménos, situated close to the sea-shore about half an hour's walk north of Angathiá. Six men were employed on the first day, and an average of twenty-one on the succeeding days.

About half a mile N.E. of the Kastri is a flat-topped hill named Rigoviglo, which, extending eastwards almost as far as to the beach, divides the Palaikastro plain into two well-marked portions. Over the crest of this hill there runs a wall, probably ancient, which can be traced in a wide circuit starting immediately below the hill by the sea-shore and returning to the beach at the point where the plain is terminated by the mountains which bound it on the north: in some places it stands several courses high, at others only the foundations are visible. This district must have contained a considerable number of buildings in prehistoric times, for many remains of megalithic walls can still be traced, doubtless belonging to farmsteads of the Mycenaean period. That the circuit-wall was built for purposes of defence does not seem probable: it cannot, to judge from the breadth of its foundations, have reached any great height, and the number of men required to defend a wall of such extent would be very considerable. The more likely explanation is that it served as a boundary to mark off the *τέμενος* of some 'king' from the common land of the community, and to prevent the cattle grazing on this latter from straying on to the estate reserved as the private property of the chief.[1]

[1] For a discussion of the Homeric land-system, see Prof. Ridgeway's article in *J.H.S.* VI. 319 foll.

At the N.W. corner of the plain there are indications of Venetian occupation in the form of a reservoir built of small stones and mortar, with the remains of an aqueduct leading to it from the side of the hill, which we were told had been cut in order to bring down water from the plateau of Toplu. Higher up the slope were the ruins of a large, vaulted building of similar construction, which perhaps served as a depôt for the produce of the plain, in the same way as the modern store built close to the sea at the southern foot of the Kastri.

FIG. 1.—PLAN OF BUILDINGS AT KOURAMÉNOS (1 : 500.)

Within this area our attention was especially called to a field owned by the monastery of Toplu, but cultivated for many years past by the dyer of Palaikastro, Jannis Brilakes. Indications of walls were visible in several places, and a number of stones taken from ancient buildings have been used to construct a breakwater to prevent the overflow of a neighbouring stream; a large door-sill of Cavo Sidhero stone had also been recently turned up by the plough.

This evidence, and that of several large stones which shewed above the surface, led us to begin excavations at this point, and a complex of walls was presently laid bare, which proved to belong to a group of buildings running parallel to the sea-shore and divided into two main blocks, situated close together but seemingly unconnected. The shore, which here consists of a narrow and rapidly shelving beach running north and south, lies about 25 metres E. of the eastern wall of the large *megaron* of House **C** (see Fig. 1), and forms the centre of a fine bay bounded on the

south by the Kastri, on the north by the hills which terminate the Palaikastro plain, the distance between them being a little less than a mile.

The Construction of the Houses.—Though there is no wall which can be strictly called megalithic, yet a good many large blocks of stone have been used in the construction, especially at the corners. The gap in the north-eastern corner of the *megaron* of House **C** is clearly due to the removal of the corner-stone, which must have been of immense size, while in the south wall of House **B**, at the angle above **B** on the plan is a huge block of conglomerate, the only one which occurs in these buildings. We may thus conclude with certainty that this was at one time the S.E. corner of the house, and that the eastern room is a later addition. The bounding walls of the northernmost block, *i.e.*, of the unexcavated portion of House **F**, are the nearest to being megalithic: they are built of large, roughly squared stones which are often as much as ·40–·60 m. in width. The repeated set-back in the southern wall of Houses **A** and **B** is a well-known feature of Mycenaean architecture, and occurs again at Roussolakkos, though in a much less pronounced form.

The best door-sills, *e.g.*, those at the entrance and exit of the vestibule of House **A**, are of the same fine grey limestone of Cavo Sidhero which is used for this purpose at Roussolakkos. In general plan the buildings resemble the normal 'megalithic' homesteads of East Crete, but with a better covering of earth, especially in the centre, where the walls stand three or more courses high.

Interior of the Buildings.—The southern block is divided into a northern and a southern section by a wall which runs right through the entire breadth of the building without a door. In the southern section we have two groups of rooms which do not communicate with each other. The western of these (House **A**) is entered by a vestibule provided with a fine door-sill: on the right of this is a room roughly square, in which was found a polygonal slab of stone (greatest diagonal, ·36 m.) with a circular bowl-like depression in the centre: in the floor was embedded, apparently *in situ*, a stone mortar which had been worn through and so resembled a large funnel (diamr. at top, ·42 m. outside, ·25 inside; depth ca. ·40). Beyond this is a second and larger room, with a niche or recess at its S.E. corner. On the left of the vestibule is a small room, seemingly doorless, in which a similar recess, formed by a short transverse wall, contained a

large earthenware jar. House **B**, the south-eastern corner of the block, consists of four rooms, the largest of which was, as we have seen, no part of the original plan, but a later addition. The house, which is entered from the east, is so built that in order to reach the fourth and innermost room one must pass through the other three.

The northern section of this block of buildings (House **C**) is formed by a group of interconnected rooms, the most prominent of which is the large L-shaped *megaron* which may be entered either from the N.W. corner by a door opening out from a small paved area or court, or from the S.E. corner by a narrower entrance. About the centre of the longer arm of the L are carefully worked stone jambs for two doors. These jambs, which are of the usual type found at Knossos and elsewhere, are still *in situ*: they are ·74 m. in breadth, and the part between the projections is ·53 m. in breadth by ·13 in height. There is in their arrangement a striking lack of symmetry, for while one side jamb abuts directly on the western wall of the *megaron*, the other is joined to that on the east by a short transverse wall. This irregularity suggests that we have here to deal with a reconstruction, and the idea is confirmed when we find in the room west of the *megaron* a pair of jambs flanking the entrance of a small closet or cupboard, which, though broken, correspond roughly with those of the *megaron*. Their present position seems somewhat unusual, and the conjecture suggests itself that they originally belonged to a third door in the same line with the other two at a time before the room with the closet had been cut off from the *megaron*. This conjecture is corroborated when we find that, supposing this third door to have been uniform with the other two in size, the western jamb would abut directly upon the western wall of the closet just referred to. We shall find in examining the northern block of buildings unmistakable signs of a reconstruction, which may have taken place contemporaneously with that of the *megaron* of House **C**. In the north wall of this are two projections, forming what may have been a fireplace, while almost opposite them, in a niche or recess in the wall, was discovered a small hoard of bronze objects, consisting of—

1. A needle, ·197 m. long; of square section in the upper part, becoming gradually round towards the point; flattened at one end and pierced.

2. A chisel (?) ·26 m. long when found, ·03 m. broad; pierced at the end.
3. A double axe, formed of two very thin laminae soldered or welded together and diverging in the centre so as to form a hole for a round haft; breadth across centre, ·06 m. Both edges have been broken away, but the original length of the axe must have been at least ·24 m.
4. Similar double axe, composed of two thin plates overlapping at the centre, where they form a tube for the shaft. One edge is partly preserved, and shows that the original length was ·25 m., breadth ·05.
5. Broad flat celt, ·18 m. long, with one rivet-hole, like one from Kythnos in the British Museum (Ridgeway, *Early Age of Greece*, I, Fig. 24A); breadth at butt ·05, at edge ·08.
6. A thin lamina ornamented with bosses in *repoussé* work; in shape like the side of a pair of bellows, with two projecting ears; height ·124 m., breadth ·08.
7. Upper part of a knife with two rivet-holes, breadth ·024 m., length ·06.

Close by was found a bronze chisel ·34 m. in length, the largest bronze implement as yet found at Palaikastro. A number of fragments of plaster show that the walls of the *megaron* were ornamented with a fresco decoration in red, blue, and white: the interior of the niche in which the bronzes were found seems also to have had a coat of plaster. Signs of plaster were also forthcoming in the room on the S.W. of the *megaron* and the small closet opening off it: perhaps this dated from a period anterior to the rebuilding, when, as we have seen, these two rooms not improbably formed part of the *megaron*. The north-western portion of this house is formed by a large room which may have been an open court, from which there is a back door into the house itself: its most striking feature is the extraordinarily thick wall which bounds it on the west, and of which no satisfactory explanation has suggested itself.

The northern group of buildings consists, so far as excavated, of three houses. Of these the eastern one (House **E**) has two doors on the east, and possibly one or two on the north: of the interior only the inner face of the western wall was traced, and the position of a single transverse

wall determined. The northern building (House **F**), which was partially cleared, is entered, like House **A**, by a vestibule, the massive door-sill of which originally called attention to this spot. To the left of this is a small room containing a recess in its south-eastern corner, in which was found the late Mycenaean vase described on p. 320. Beyond this, but not accessible from it, was a second room, in which was found still *in situ* a large piece of floor cement. From this room came also a flattish, oval stone (·10 m. high, ·06 broad) with a notch in the middle of each of the longer sides ; its similarity to some of the Trojan idols (H. Schmidt, *Schliemann's Sammlung troj. Altertümer*, No. 7409) is very striking. To the right of the vestibule lie two further rooms, and a door from the more westerly of these, which is adjoined by a small chamber, leads into the unexcavated portion of the house.

The building marked **D** on the plan, which forms the central part of the whole system, is strikingly different from the rest. It seems to be almost entirely open on the south side, and has also two doors, one on the west, the other, provided with a large sill built of irregular stones, on the north : the narrow opening close to the N.W. corner is seemingly intended for a rubbish-shoot or some similar purpose. In the N.W. room were found fragments of white plaster, probably fallen from the walls, while in the S.W. corner were the remains of a slab pavement. The north-eastern portion of **D** was occupied by a raised platform on which rested a stone roughly circular (diamr. ·42 m.), which was surrounded by lower stones forming a sort of runnel round it. This, and the presence of a trough immediately west of it, made it seem probable that the apparatus was the bed of a primitive form of olive-press. In any case its construction dates from a period subsequent to that at which the house was first built, for the removal of the round stone and the pavement revealed beneath them four very large ashlar blocks bedded in plaster, filling up the space between the two walls and also running into the N. wall. The removal of these hewn blocks showed the plan as it stands drawn, where, however, the round stone is shown as it was found standing on the pavement. The use of fine ashlar blocks for mere packing shows that they come from some previously demolished structure, and must be brought into connection with the reconstruction which we have already noticed as having taken place in House **C**.

D is separated from **F** by a blind alley, closed on the east by the

western wall of House **E**. At the end of this alley was found a large coarse jar, seemingly *in situ*, blackened by fire inside and having an original hole in the base. Close by were a bronze double axe (length ·15 m., breadth ·057), three stone rubbers, two hones, sixteen 'loom-weights' of various forms, a pierced stone, two circular pebbles similar to that illustrated in Evans, *Ancient Stone Implements of Great Britain*, Fig. 165, and a large number of fragments of clay and stone vessels.

Pottery, and other Small Finds.—Of Kamáres ware only one fragment was found, the spout of a beaked jug: painted Mycenaean pottery was also rare, the only vase which it was possible to restore being the bowl referred to above. This bowl in conjunction with the top of a big, coarse Bügelkanne serves to show that the Kouraménos settlement was contemporaneous with the later Mycenaean occupation of the Roussolakkos site, while the rarity of painted fragments points to the poorer character of the place. The mass of the pottery was of the common domestic kind (*pithoi*, strainers, cooking pots, Bügelkannen, &c., mostly broken) which occurred in such abundance in the floor-deposits of Roussolakkos. It may therefore be concluded that the desertion of the Kouraménos site occurred at the same time as that of the main town.

Besides the finds which have been referred to above, we may here mention four obsidian chips; a number of fragments of steatite vessels, including one of a good blossom-bowl; part of a lamp of the usual Mycenaean stone type much calcined, and a circular lid; four hones; several rubbers; two saddle-querns; a fragment of a large limestone jar; two stone slabs with circular bowl-like depressions in the centre, one square, the other an irregular polygon; two shells, a triton and a cowrie; and a bronze pin.

R. M. DAWKINS.
MARCUS NIEBUHR TOD.

EXCAVATIONS AT PALAIKASTRO. II.

§ 10.—Hagios Nikolaos.

On March 31st, 1903, and the three following days I conducted a trial excavation at a site situated at about an hour's distance from Roussolakkos, and known as Hagios Nikolaos from a small church of that name. During the first three days I employed ten men, on the fourth only two.

The most prominent feature of the landscape is the height called Módhi (1776 ft.). From the foot of this there runs almost due east a deep valley with a river-bed, which, although quite dry at the time when I saw it, must sometimes carry off a considerable volume of water from the surrounding hills. The valley is at first narrow and its sides very steep, but a little way above the chapel it broadens out considerably: although the left bank is steep and in places almost precipitous, the right side rises in a gentle slope, forming a series of terraces which are under cultivation and afford a good harvest in spite of the stony character of the soil. It is on this southern slope that the chapel stands, situated on a small outcrop of rock and surrounded by cornfields. These, however, lie chiefly to the north and west: on the south the ground rises more and more sharply, the cultivated fields giving place in some fifty yards to a steep slope covered thickly with bushes and undergrowth and terminating in a line of low cliffs known locally as *στὴν ἄγριο μέλισσα τὸ φροῦδι*, 'the Wild Bee Crag.' Above these, again, the ground rises very rapidly to form the northern portion of the great upland plateau of Magasá and Karýdhi. On the east the gentle slope of the valley extends for about a hundred yards beyond the chapel, where it is intersected by a

deep, though narrow, torrent-bed running down from the low cliffs just referred to and joining the main watercourse. Beyond this the soil is waste and uncultivated as far as a second and larger stream-bed, which breaks through from the upper plateau by a wild and precipitous gorge, and which also runs down to the main river-bed, its lofty eastern bank forming the remarkable natural bridge or ramp over which runs the road connecting Palaikastro with the plateau and with the Karoúmes valley. This ramp is continued northwards by a low line of hills which closes on the east the Hagios Nikolaos valley, and forces the river to take a sudden bend in a northerly direction, which it follows until, emerging on the open plain of Palaikastro, it turns once more east and flows through the plain to the sea.

The site had been previously visited by Professor Halbherr, who found built into the *ἁγία τράπεζα* of the chapel a fragment of an inscription recording a treaty between Knossos and Hierapytna,[1] as also by Mr. Evans, who directed our attention to the possible significance of this piece of evidence. Shortly after our arrival at Palaikastro, Mr. Bosanquet and I revisited the site together. We found the inscription somewhat disguised under a liberal coating of whitewash which had been recently applied to it in common with the whole interior of the chapel. The same whitewash also partially concealed the material, though not the form, of a fine Mycenaean 'table of offering'[2] of black steatite, which was used as a *θυμιατήριον*: we subsequently obtained permission to remove it, and it is now in the Candia Museum. This 'table of offering' was similar in form to the usual type of steatite lamp found on most Mycenaean sites, with a circular stalk or stem below and a round bowl in its upper surface; this bowl, however, was complete, and was not furnished with lips such as lamps of this type have for their wicks. It had been found at Rousso-lakkos, and brought from there to Hagios Nikolaos. The presence of the inscription was harder to account for, though it may have been brought by sea from Knossos or Hierapytna as ballast and left on the beach at Palaikastro. There is, however, a local tradition to the effect that it was found on the spot, and as the place would accord well with the data supplied by

[1] Published in *Museo Italiano di Antichità Classica* III (1890), p. 612, Collitz-Bechtel, *Sammlung*, 5073.

[2] Its dimensions are—height ·18 m., length and breadth ·35 m., interior diameter of bowl ·18 m., rim of bowl ·02 cms.

the Toplu inscription[1] for the site of the temple of Dictaean Zeus, the principal sanctuary of the Eteocretan territory, we decided to test the ground by digging trial trenches in the most likely-looking spots.

Remains of Early Houses.—No traces at all of ashlar masonry were found, nor any architectural members either in marble or in local stone. I was told, indeed, that a 'squared block of marble' had been discovered at a spot some little way N.W. of the church, and had been carried off to the village of Palaio Mitato: I did not, however, see the stone in question, and trial pits at the place indicated showed no traces at all of any building. On the other hand, indications were not wanting that the valley had been the scene of an early settlement. On the N. bank of the stream, about ten minutes' walk from the chapel, stands a group of two or three houses with the remains close by of a massive megalithic wall, which unfortunately has been made to contribute largely to the building of a modern house and byre. Further up the valley, in a commanding position on the crest of a low hill, I discovered the foundations of a small house of unhewn stones: the sherds found in and around it were not, however, sufficient to determine its date. Close by the chapel the evidence was more definite. About 150 yards N.W. of it a small two-roomed house[2] of unhewn stones was found, which is dated by the objects in it to the Mycenaean period. In the room to the E. were many large fragments of two or more *pithoi* of the ordinary Mycenaean type, a number of fragments of steatite, of which the largest was perforated, a small circular lid of steatite (diameter ·083 m.), a "saddle-quern," and several bits of a thick white floor-plaster. The western room contained a small hoard of stone rubbers, thirteen in number, found together close to the south wall: two of these must have been in long use to judge by the extraordinary polish of their surfaces, while three appeared to have been very little used. Along with these was found a hone ·145 m. long, ·048 m. broad, and ·035 m. high. This room also yielded a large *pithos*-cover with handle, three 'saddle-querns,' two fragments of a broad clay runnel (?), and a flat stone with two smooth surfaces, very roughly circular, ·19 m. in length and breadth.

[1] Pashley, *Travels in Crete*, I 290; Spratt, *Travels and Researches in Crete*, II 430 foll.: Halbherr, *Museo Italiano*, III (1890) 570; Kern, *Inschriften von Magnesia ad Maiandrum*, No. 105; Dittenberger, *Sylloge*[2], II No. 929; Holleaux, *Hermes* xxxix. (1904) 78.

[2] It consisted of two rooms, communicating by a door in the partition wall: total breadth 4·4 m., length 5·7 m.

Immediately outside the house to the north was found a small cup of the common Mycenaean type, of very rude make (diameter at mouth ·07–·08 m., at foot ·04 m.), along with fragments of other cups, and a fine black stone rubber with two highly polished surfaces. A second runnel with two parallel 'ribs' crossing the flat bottom and a small yellow plaque with incised lines appeared to me to belong to a much later date than the rest of the pottery found in this house, and the inference that it was inhabited right on into Hellenic times was confirmed by the discovery of a bronze coin, which, though in a bad state of preservation, I believe to be certainly Hellenic.

The most striking point about this house was its extreme smallness, the two rooms measuring 2·03 × 1·3 m. and 2·4 × 2·1 m. respectively. These dimensions would seem to point to the conclusion that the building was of the nature of a store or outhouse rather than a dwelling.

A short distance to the S.E. the foundations of another building were cleared: this also consisted of two rooms, divided by a partition wall about ·5 m. thick. The interior of the house measured 5·5 by 5·8 m., and produced one green stone rubber and a large number of sherds: among these there was nothing distinctly Mycenaean, while a number of them looked rather Hellenistic or Roman. Another house was located S.W. of the chapel, but as it yielded only a few sherds, and those of uncertain period, I did not entirely clear it.

The Cave Burials.—The cliffs above the chapel, to which reference has already been made, contain a number of small caverns and rock-shelters: of these I examined three, which were pointed out to me by inhabitants of the valley as containing 'human heads.'

I. At the foot of the cliff, above and slightly eastwards of the chapel, is a shallow cavern, with a low wall at its entrance. It proved to contain a number of human skeletons, whose skulls, seven or eight in number, were particularly well preserved: several of these were afterwards examined by Mr. Duckworth. Along with these were the bones of various animals which had probably made the cavern their lair: these included bones of badger, hare, sheep (?), and partridge. No metal objects were found, and of pottery only two small fragments.

II. In a second rock-shelter, some little way to the W. of the chapel, two or three persons seem to have been buried. The bones were in a fair

state of preservation, but I only found fragments of one skull. No pottery came to light, but a bronze buckle and button were discovered pointing to a late date for the interment, which was probably medieval.

III. The third rock-shelter I examined was situated half way up the cliff, above a steep slope called 'the charcoal hollow' (*καρβουνολάκκος*); it lies a little to the E. of the chapel, and immediately above the stream-bed referred to above (p. 336) as bounding the cultivated area. It is not very easy of access, and I was guided to it by Stavros Kandikakis, one of my workmen, who remembered having seen bones there while a shepherd boy forty years ago. Before the rock lies a narrow ledge or platform some eight metres in length, fronted by a low wall at a distance of two metres from the face of the rock. On this ledge I found the remains of a clay *pithos*, with an ornament consisting of a single band of 'ropework': it was lying on its side, and more than half of it had been broken off and had disappeared. The part which remained was full of human bones, while on one fragment was a double-axe, which had been deeply, though rudely, incised while the clay was still soft. Mr. Bosanquet subsequently examined these fragments and found that the *pithos* was contemporary with the chief settlement at Palaikastro. Besides the general similarity of the ware, he noticed three specific points of agreement: (1) the relief band on the shoulder ornamented with finger impressions, (2) the way in which the handles tended to detach themselves, owing to their having been merely impressed while the clay was soft on the surface of the jar, which was scratched in order to afford them a better hold, and (3) the flange or band running round the *pithos* at its base.

No traces of later interments were here visible, but at a slightly lower level I found evidence that the rock-shelter had been used as a place of burial at a very early period. There was a large accumulation of skulls and other bones, all of them human with the exception of the jaw of a pole-cat and the tooth of an ox. These bones were examined by Mr. Duckworth, who accompanied me to Hagios Nikolaos on April 3rd with that object. Along with the bones, placed close by the skulls, were found some very early vases, which must be attributed to the very beginning of the Bronze Age. These vases, which are with one exception of a coarse grey clay, are all hand-made: they are without bases and are so imperfectly flattened at the bottom that they do not stand at all firmly. Two small fragments were found with a pattern of cross-hatched lines finely

incised on the polished clay, but all the other fragments as well as the whole vases are devoid of any incised or painted decoration.

FIG. 1.—VASES FROM ROCK-SHELTER.

The whole vases are ten in number, and fall into four classes :—

A. Vases with oblate spherical bodies tending to angularity at the line of greatest circumference : above this body is a short cylindrical neck, on which fits a corresponding cap, which would act as a cover and also, perhaps, as a cup. Both vases and caps are provided with vertical suspension holes, enabling lid and vase to be tied together : the 'lugs' through which these holes are pierced are either single flattened bosses projecting from the body of the vase or the top of the cap, or they consist of pairs of short circular stumps. Of this class five examples were found—

1. Vase with double handles and cap (Fig. 2 a, b).

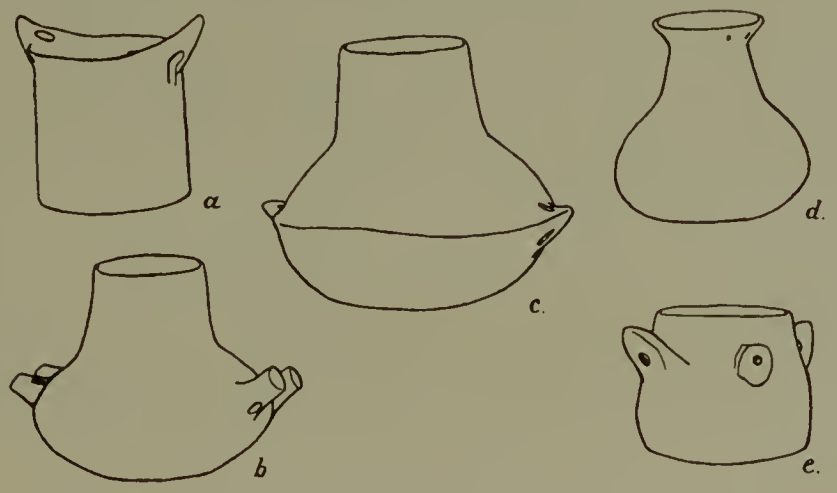


FIG. 2.—TYPES OF VASES FROM ROCK-SHELTER. B. 5.

2. Vase with single handles and cap. Height ·108 m., diameter ·095 m., height of cap ·063 m., diameter of cap ·042 m.
3. Vase with single handles and cap. Corresponding dimensions, ·075 m., ·077 m., ·045 m., ·052 m. The cap, however, is too large for the neck, and there is some doubt whether it belongs to this vase.

4. Vase with single handles, without cap. Here the angularity above referred to is very marked, forming a sharply defined, though irregular, line round the body. This has the smoothest surface of all the vases, a surface which in some places is blackened by smoke (Fig. 2 c).
5. A similar vase with the neck broken off.

Among the fragments were three broken bowls, probably remains of vases of this type, and also the neck of such a vase.

B. A vase of finer clay, thinner ware, and more delicate form. The transition between body and neck is more gradual, and the top of the neck ends in a lip in which are pierced four small horizontal holes (Fig. 2 d).

C. A cup-like vessel of yellowish-brown clay, narrower at the top than at the foot. The handles, which are pierced with suspension-holes, are not set on horizontally, but rise from the body: originally it had a spout, but this has been broken off. This vessel is of coarser make than the rest, and the bottom is so rounded that it will not stand straight (Fig. 2 e).

A second example of this type was also found.

D. Two basins; the 'lugs,' pierced with suspension-holes, are situated close under the rim of the bowl.

The relations between these vases and those found at Palaikastro have been discussed on p. 299 of the present volume by Mr. Dawkins, to whom I wish to express my warm thanks for the help he has given me in writing the foregoing description and catalogue, and for making the drawings which have been reproduced in the accompanying figure.

In form and technique there is a certain resemblance between the vases of class A and some which were discovered in prehistoric graves on Paros and Despotikon by M. Tsountas (Ἐφημ. Ἀρχαιολ. 1898, Pl. IX. Nos. 1–5), and at Pelos on Melos by Mr. Edgar (*B.S.A.* III. 35 foll.), though the bodies of the Cretan vases are more squat, the necks more nearly cylindrical, and the union of neck and body in consequence more clearly marked. Points of comparison may also be found with the vases from the prehistoric grotto of Miamù excavated by M. Taramelli (*Am. Journ. Arch.* 1897, 287 foll.). But the closest parallels I can find are with the pottery from the earlier period of the second town at Troy, described by H. Schmidt in Dörpfeld, *Troja und Ilion* (Athens, 1902), I. 252–280, and in the catalogue of *Schliemann's Sammlung trojanischer Altertümer* published by the Berlin Museum (Berlin, 1902): many of these are also illustrated and described in Schliemann, *Ilios* (London, 1880), 356–369. The Cretan vases, however, are more primitive in appearance: the majority of those from Troy have the top of the neck turned outwards so as to form a slight lip, while most

have also a base or three short legs. The 'lug' approaches very nearly that figured in Schmidt's Catalogue, No. 556, p. 28, as also one from the first city at Troy (*Troja u. Ilion*, I. p. 247, Fig. 102), while the closest-parallel to the Cretan caps is also from the lowest Trojan stratum (*op. cit.* I. p. 249, Figs. 110, 111): the two caps there illustrated, however, have four 'lugs,' all of which are in the first instance pierced with suspension holes, while in the second only two are so pierced, the other two remaining as ornamental projections. Somewhat similar caps of silver were also found at Troy covering thin-necked silver jars (*op. cit.* I. 350–1, Figs. 276, 277). The holes pierced directly under the lip of the vase of class B were for the attachment of a flat lid; similar lids with two or four string-holes occur at Troy in considerable numbers: see Schmidt's Catalogue, Nos. 485–494, 759–804.

Besides pottery the only small objects found were (1) a small leaden or silver bead, pierced, cylindrical in shape but pinched in the middle, and (2) a fragment of an article in bone, ·053 m. in length, resembling in form the end of a pocket paper-knife.

At the left-hand side of the ledge a small cavern in the rock, sufficient to shelter half a dozen sheep or goats, has evidently been much used by shepherds, by whose fires it has been blackened, and by their flocks, which have rubbed the rock quite smooth in places. If there were ever any human remains here, as I believe to be more than likely, they have long since been cleared out. Below the earth which was in this cavern three levels were distinctly traceable. There was first a thin layer of small stones, seemingly water-worn; immediately below this was a stratum of charcoal, in which were found an obsidian chip and a considerable number of sherds similar in character to the vases described above, though of a more reddish tinge; and beneath this was the floor level of a hard clayey earth, 'like that which we put on the roofs of our houses nowadays,' as one of the workmen explained.

MARCUS NIEBUHR TOD.

EXCAVATIONS AT PALAIKASTRO. II.

§ 11.—Human Remains at Hagios Nikolaos.

About a week after my arrival at Palaikastro, Mr. Tod having made preliminary investigations resulting in the discovery of human crania associated with pottery of a very early period at Hagios Nikolaos, it was suggested that I should visit the locality. The present report contains an account of the results of my examination made in accordance with that suggestion. The date was April 3rd, 1903, and some final notes were added on April 8th, 1903. The simple building dignified by the title of Hagios Nikolaos is placed about five miles inland from the shore of Grandes Bay, hidden in a perfect labyrinth of intersecting valleys and ravines. The particular glen, on the southern slope of which the church is situated, runs, generally speaking, east and west, but turns at either extremity eastwards, running first to the south and then sharply resuming an eastward direction; while the western end, the head of the valley, trends slightly to the north.

A steep ascent across a couple of fields above the church brings one to the foot of the rocks forming the southern boundary of the valley, where the familiar local structure of an easily-weathered limestone is met with at once. Thence one must scramble up among great masses of lentisk and carob, with numerous thyme and sage bushes, in the interstices of fallen boulders, till, at about sixty feet above the foot of the scarp, one arrives at a cleft which gives access (cf. Fig. 1.A), to the 'cave' discovered by Mr. Tod. Rock-shelter is a more appropriate expression than cave, for it is a mere shelf of rock, receding at most to some five or six feet from the face of the cliff, by the overhanging of which, this

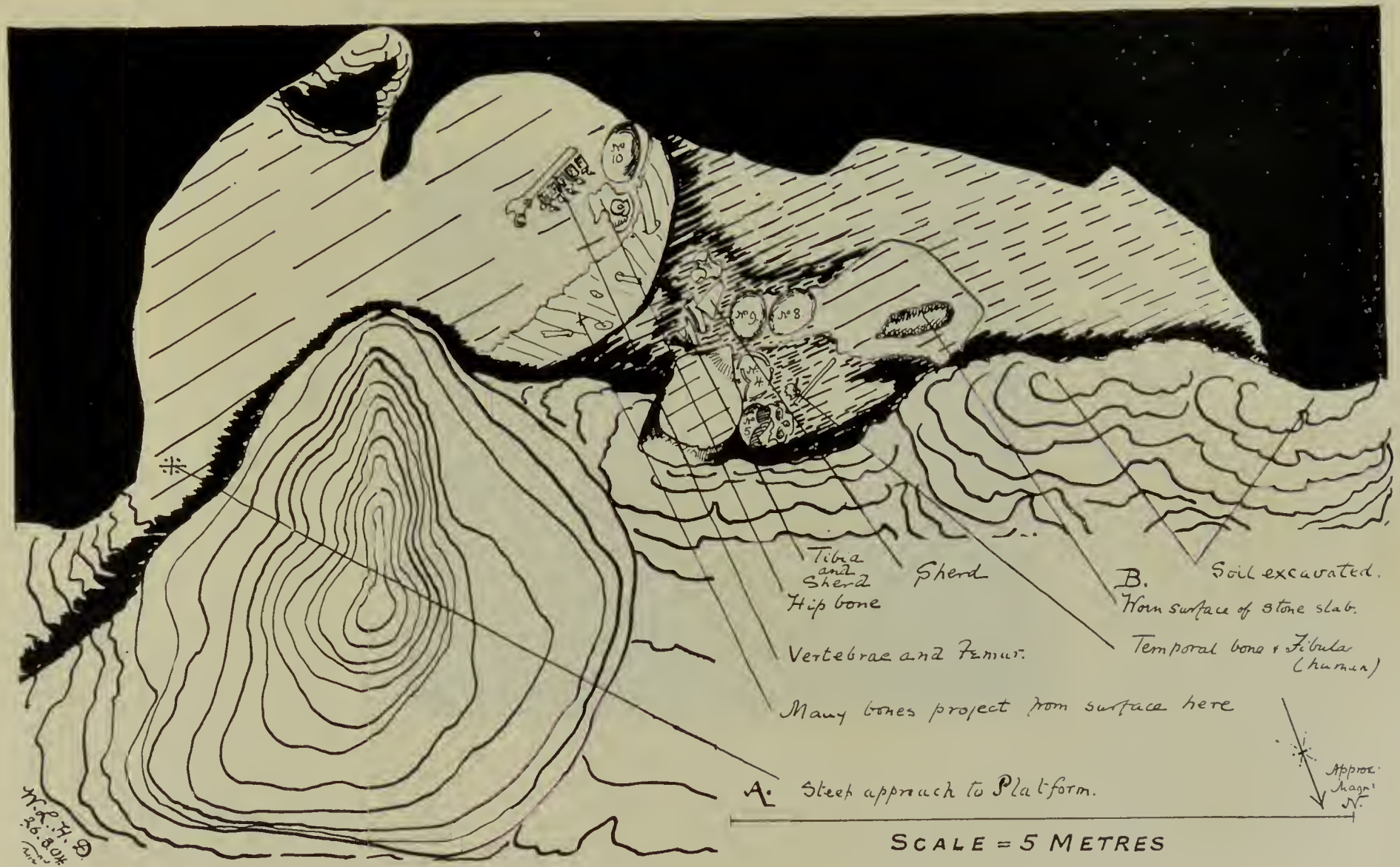


FIG. 1.—PLAN OF ROCK-SHELTER AT HAGIOS NIKOLAOS, AS EXCAVATED, APRIL 8TH, 1903.

'abri sous roche' is sheltered. Probably the shelter has been the resort of shepherds from time immemorial, and a particular attraction is furnished by the absence of water dripping from the upper parts of the rock, the cause of abundant mossy growths in similar shelters in the same line of cliffs.

From the platform one looks down on the little church, and beyond it at the corresponding cliff-wall of the northern side of the glen. The latter wall is formed by a brilliantly-coloured mass of conglomerate, a medley of

Fig. 2.—View of Interior and Floor of the Rock-shelter at Hagios Nikolaos, looking South-east.

Access to the shelter is obtained on the left-hand side (cr. Fig. 1).

reds and yellows in regular stratification. Beyond this again, a vista of low flattened ridges with an occasional peak, to which finally the eastern sea succeeds, and, beyond the nearer island of Elasa, one can even make out Karpathos and Kasos on the horizon.

Such is the situation and such the outlook from the site to be investigated. The dimensions of the platform may be gathered from the accompanying plan drawn approximately to scale. Though described as a

platform or plateau, the floor was in reality most uneven, and, as a result of the excavations of Mr. Tod's party, only that part to the right (west) of the diagram remained at all level, the remaining parts having been so disturbed as to leave two shallow pits. In the stage represented in the diagram, however, further excavations had been carried out on the part at first untouched, till this level was brought down as low as or lower than in these other regions. But on my arrival the whole floor was encumbered with débris from the superficial digging. Bones were numerous, some in fragments, a few complete and intact. Among the fragments were several referable to the skull, and remains of about six skulls were thus seen. Four skulls were speedily brought to light on the resumption of operations, and eventually others more or less fragmentary, bringing the total up to ten. They occurred in or about the middle region of the shelter (cf. Fig. 2), not in the very deep pocket at its eastern end, or near the western end. Moreover it was estimated that Nos. 4, 5, 8, 9 (shewn in the plan) must have been less than six inches below the original level broken up by Mr. Tod's party. This was shewn by their positions in relation to the area on the large stone marked in the plan (q.v. B.), the worn and polished surface of which indicates its long exposure.

A few bones of small mammals including the skull of a badger (an animal still locally abundant) occurred, but there was a striking absence of any accumulation of such remains or of the remains of domestic animals or birds, such as would suggest that the shelter had served as a habitation or dwelling-place. Charcoal fragments occurred, but these were recent. The notes made upon the several specimens of skulls are given in the sequel; and it is now appropriate to make such general remarks as can be passed on the characters of the individuals whose remains were thus found, and on the circumstances of their interment.

In the first place, the remains are in my opinion those of individuals who agree in all essentials with that population of this part of Crete which is represented in the ossuaries at Roussolakkos and Patema (Palaikastro). The skull-form and characters are the same (cf. Fig. 3); long narrow skulls with full occiput, with long narrow faces. The limb-bones denote the same physical development and stature, feeble, as we consider it, in comparison with the stouter and sturdier modern inhabitants.

The crania differ from the four specimens collected by Mr. Tod, which appear to me to be of later date. The earlier specimens are just

as fragile as those at Palaikastro, and measurements had to be made as far as possible while they remained *in situ*.

The child's skull (No. 5) presents an example of precocious union of the two parietal bones, but this is an abnormality which may occur in any human race, and its significance is quite unknown. Probably it has no effect in modifying the intellect.

A femur bears a remarkable exostosis in its upper portion; this pathological condition may be due to one of a variety of causes such as (1) spinal disease, (2) aneurysm of the femoral artery, (3) a punctured wound, (4) the disease known as myositis ossificans, (5) osteo-arthritis or

FIG. 3.—TWO OF THE ANCIENT CRANIA EXHUMED AT HAGIOS NIKOLAOS.

'rheumatics,' (6) bone-hypertrophy following fracture. In the absence of more definite evidence, I am inclined to rule out (1) (2) (4) (6) and to favour (3) or (5), but in any circumstances no particular inferences as to the ethnic relations of the individual can be drawn from the occurrence. Similar exostoses were seen in two other cases, at Roussolakkos and Patema respectively.

Finally, I incline to the belief that the skeletons were transported to this shelter and here deposited as in the ossuaries at Roussolakkos. The absolute confusion of the remains indicates this, and it is well-nigh incredible that this small shelter could have been the habitual residence of the comparatively large number (at least a dozen) of persons whose remains

have been found. That pottery should be found is not surprising in view of the number of sherds and cups found in corresponding circumstances at Roussolakkos.

The net result then of my investigation is to indicate that the inhabitants of Crete who used the earthen vessels found at Hagios Nikolaos belonged to the same stock as those whose remains are found at Roussolakkos and at Patema, and that they are, like them, referable to the so-called Mediterranean race.

The notes on the crania and long bones are here appended.

Brief Notes on the Crania found at Hagios Nikolaos.

No. I. Fragments of the synostosed parietal bones of what was probably a mesati-cephalic skull. The individual was probably about 50 years of age (ref. D. 150).

No. II. (D. 151). An adult dolicho-cephalic male skull; it contained cave-earth, small helices, and three phalanges, clear evidence of the artificial circumstances of its interment here.

No. III. (D. 152). A calvaria with the base, but no face or mandible. An ovoid dolicho-cephalic female skull: the occipital renflement is distinct: the brow-ridges insignificant. In all respects very similar to the prevailing skull-form at Roussolakkos and Patema. The left orbit contained a cuneiform bone of the foot, wedged firmly in.

No. IV. (D 153). Portions of the synostosed parietal bones of an adult skull, of dolicho-cephalic proportions.

No. V. (D. 154). Fragments of the cranium of a child of about 6 years of age; remarkable for premature synostosis of the parietal bones. It is broader than the other crania, being just brachy-cephalic in proportions.

No. VI. (D. 155). Frontal and parts of the parietal bones of an adult male skull of seemingly dolicho-cephalic proportions: sagittal synostosis complete; the individual was about 50 years old. The brow-ridges are not massive.

No. VII. (D. 156). Parts of the squama occipitis of the parietal and frontal bones of what was probably an adult female skull of mesati-cephalic proportions.

No. VII*a*. Fragment of a thick occipital bone.

No. VIII. (D. 157). Large oval dolicho-cephalic cranium, without the face, of an adult male: sagittal synostosis nearly complete: brow-ridges moderately developed: the transverse occipital crest is not marked.

No. IX. (D. 158). Large oval dolicho-cephalic male skull. The sagittal suture is completely synostosed. The brow-ridges are moderately developed. The occipital crest and mastoid processes are massive. Nasal and orbital apertures are small.

No. X. (D. 159). Mesati-cephalic skull which at once crumbled into fragments. Sex and age doubtful.

No. X*a*. Fragments of a large skull with marked occipital renflement: the fragments are too few and small to yield measurements.

The following cephalic indices are provided by the foregoing specimens.

No. II. (D. 151)—74·2.
No. III. (D. 152)—74·3.
No. V. (D. 154)—80·4.
No. VIII. (D. 157)—72·7.
No. IX. (D. 158)—71·5.
No. X. (D. 159)—78.

The following averages result from measurements of the long bones of the limbs of adults: despite the great number of bones, very few were perfect enough to provide data.

Humerus:	average length of	2	. . . . .	313	mm
Radius:	,, ,, ,,	2	. . . . .	212	,,
Femur:	,, ,, ,,	3	. . . . .	383	,,
Tibia:	,, ,, ,,	5	. . . . .	321	,,

In the same limb, the femur measured 372 mm., the tibia 283 mm.; in no other case could two bones be referred to the same skeleton.

As might be inferred from the small linear dimensions of these limb-bones, the estimated stature of the individuals was very slight; if we suppose that the bones which could be appropriately measured all belonged to female skeletons, the probable average stature of the latter was about 1520 mm., which, however, is not very different from the average stature of eight modern Cretan women of Palaikastro, viz., 1546 mm.: on the supposition that the bones are male, the probable stature was on the average about 1560 mm., which falls far short of the average stature of even the prehistoric male inhabitants of Palaikastro (1625 mm.), much more so of the modern male inhabitants of that locality (1677 mm.). The probability is therefore that these bones are female, and are to be associated with one or other of the feminine crania above described.

§ 12.—Ossuaries at Roussolakkos.

The following account is practically identical with section (*a*) of my Report to the Cretan Committee of the British Association (cf. *Reports*, Section H, 1903, Southport meeting). On the 26th March, 1903, the day of my arrival at Palaikastro, I commenced work on the ossuary discovered and partially excavated in the preceding year (cf. Report by

R. C. Bosanquet, in *Man*, 1902). The work consisted in exposing the crania in the several compartments of that enclosure, and I soon found that the only reliable method of obtaining satisfactory cranial measurements was to clear away the surrounding earth from each skull and to measure while the specimen was still *in situ*. Subsequently, each skull (to the number of about thirty) was carefully removed, and then, moistened paper having been spread over and around it, a covering of plaster of Paris was finally applied: in this way it was hoped to render the skulls less liable to destruction in the transit to Candia or to such other destination as might be determined upon. Lastly, several skulls were further strengthened by receiving an internal lining of plaster of Paris after so much of their earthy contents had been removed as was practicable. With regard to the other parts of the skeleton, the long bones were in some cases also measured as they lay exposed, this precaution being necessitated by their extreme fragility, especially as regards the articular ends. But even so, comparatively few were suitable for measurements of length, for the ends were very frequently already destroyed. Measurements of the cross-section of the shaft of such bones were, however, made in a very great number of instances in which no reliable measurement of the length was obtainable. Incidentally, various objects such as earthen vessels, occasional fragments of bronze or copper, and occasionally bone-fragments from skeletons of domestic animals, were found intermingled with the human remains, and the former (*i.e.* all specimens other than animal remains) were handed over to the Director.

Four days' work enabled me to complete the examination of this first ossuary (No. 1 on Plan, Fig. 4), after which attention was transferred to the site known as Patema, situated about 600 yards to the south of the knoll first examined. At Patema many human remains were found associated with numerous sherds and earthen vessels, and while the state of preservation of the former closely resembled that of the Roussolakkos bones, it is noteworthy that the comparatively regular arrangement within an enclosure was absent. I have no doubt, however, that the remains are approximately contemporaneous in date.

My superintendence of the work at Patema was interrupted to admit of examining the rock-shelter at Hagios Nikolaos as described in my former note, but the Director kindly replaced me (this was on the 3rd of April), so that the work was uninterrupted till April 5th, when the Easter holidays

caused a break until April 9th. On this date excavations were resumed at Patema, but as they proved almost entirely fruitless, it was decided to make some further researches nearer the first ossuary.

After several trial pits had been sunk, without success, a second ossuary was found (No. 2 on Fig. 4) about fifty feet from the first, and the next two

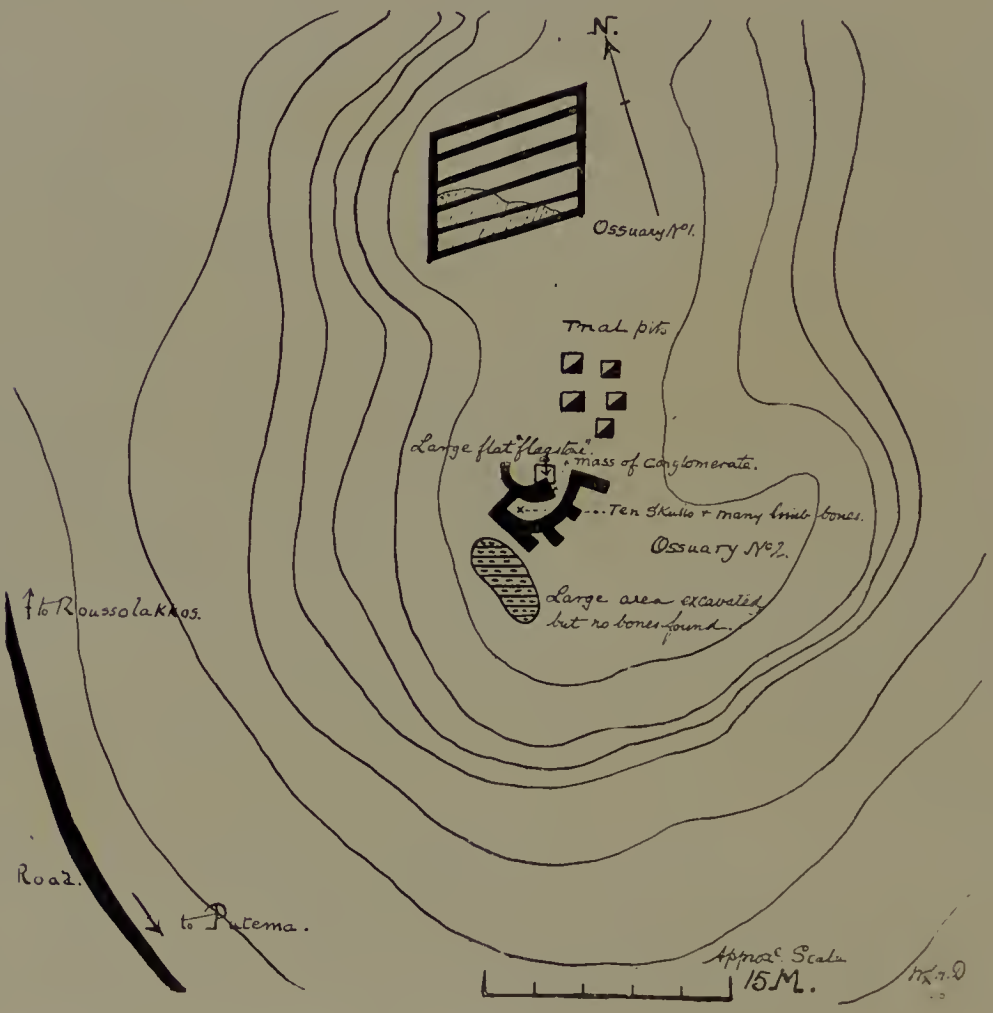


FIG. 4.—SKETCH-PLAN OF THE SECOND OSSUARY AT PALAIKASTRO, EXCAVATED IN MARCH AND APRIL, 1903.

The contour lines provide general indications only.

days were occupied in examining it. As in ossuary No. 1, here also walls and suggestions of compartments were met with, but the arrangement is far from being as regular as in the first ossuary. It is to be noticed that both ossuaries are situated on the highest parts of a low knoll or hillock, and no doubt much denudation of this has occurred since the walls were

built and the skeletons placed here. A large flat stone described in the plan as a 'flagstone' was found in Ossuary No. 2, but could be associated with no special human remains.

From the two ossuaries and the site at Patema, about fifty-eight male and twenty female crania have now been obtained in a condition suitable for yielding the important data of the proportions of length and breadth. (The crania in the Candia Museum and those measured by Dr. C. S. Myers are here included.) They shew indisputably that the head-form of these early Cretans was distinctly dolicho-cephalic; herein the skulls agree with other Cretan crania of early date, and with the majority of early Greek (mainland) and 'Aegean' specimens.

But an important point upon which information has been desired by many who are interested in the prehistoric ethnology of the Aegean area in general, and of Crete in particular, is the inquiry as to the predominance or the contrary, of one cranial form. The acquisition of such a large number of crania of early date affords a means of answering the question more definitely than was previously possible. Previously, it was known that short or broad skulls do occur, as at Antiparos; but the instances were admittedly not numerous.

The crania of early date, which are forthcoming for examination, provide material for the statement that, in this particular population, not only is a long-headed type shewn by the average figures, but this type is also dominant; for in percentages the dolicho-cephalic crania provide 65·3, while 8·55 per cent. only are definitely short or broad, 26·15 per cent. being of mean proportions. The foregoing data refer to male crania, whereas among the female crania the long-headed type is even more definitely predominant with a percentage of 70·6 (5·87 per cent. of short skulls and 23·53 per cent. of mean proportions). Nevertheless a percentage of from 5·87 to 8·55 of broad skulls must be recognised.

The crania derived from Palaikastro and Hagios Nikolaos are almost certainly of earlier date than those discovered at Zakro and described by Boyd Dawkins, and those from Erganos described by Sergi. And the fact of the association of long with short crania is more valuable than the fact of short crania being found in one locality, and long crania in a second perhaps far removed from the first.

The long bones afford a means of estimating the stature of these early inhabitants of eastern Crete: this would seem to have been about

1625 mm., which, judged by the English standard, is a small figure (below 5ft. 5in.). It seems that the early Cretans anticipated in head-form

FIG. 5.—SKELETON FOUND AT PATEMA.
The skeleton rests on its left side, and the skull would have been to the left of the photograph: the knees are drawn up.

FIG. 6.—ANOTHER VIEW OF THE SKELETON SHEWN IN FIG. 5.
The curve of the backbone is noticeable on the left, and the bones of the feet, especially of the toes, will be seen on the right side of the skeleton as shewn in the photograph.

and stature the proportions assigned to the 'Mediterranean race,' and thus can be described as the earliest known representatives of that race.

Reference must finally be made to the very important discovery (at Patema) of a skeleton (the skull was not present) lying in the 'contracted' position, and on the left side. The long axis of the corpse had been placed approximately N.E. and S.W., the head having pointed to the east (cf. Figs. 5 and 6).

The remainder of my work in Crete consisted of an investigation of the characters of the modern inhabitants including children and adults. It may here be summarised by stating that the modern inhabitants of Sitia province in eastern Crete do not by any means reproduce the characters of head-form or stature of the early population, for instead of having long heads, they are brachy-cephalic, and in stature average (adult males) 1677 mm. as against 1625 mm.

W. L. H. DUCKWORTH.

EXCAVATIONS AT PALAIKASTRO. II.

§ 13.—The Sanctuary-site of Petsofà.[1]

(Plates VII.—XIII.)

1.—The Site.

The plain and bay of Palaikastro are bounded on the south by an abrupt ridge of hills, which run out seaward into a prominent cape. Landwards, this ridge is cut off from the mass which culminates in Mt. Simódhi by a northward and a southward valley, which carry an almost impassable track from the Palaikastro plain to the cove of Karoúmes. The highest peak of this ridge, which bears the name of Petsofà, stands directly south of Roussolakkos, and rises steeply above it to a height of 270 metres. Southwards beyond the summit the slope is at first more gentle, but becomes abrupt about a quarter of a mile further on, and drops rapidly to sea-level on the south side of the promontory. The actual summit is formed by a ragged crest of limestone, precipitous on the north side, and descending less rapidly southwards into the general slope already mentioned.

Some 10–15 m. down this face, however, the natural slope of the ground is interrupted by a zig-zag terrace-wall, ABCDE, which still stands some 2·5 m. high at its external angle C, and holds up an artificial platform of made-earth within it. The little enclosure which lies against its outer face between C and D is wholly modern, though built almost wholly of ancient stones from the walls above: the older workmen described it as a 'look-out,' but it seemed also to have served as a sheep-pen.

[1] Dr. L. Chalikiopoulos gives the name, in text and map, as Tsofàs. *Sitia, die Osthalbinsel Kretas.* Berlin (*Veröff. Geogr. Inst. Berlin*, Heft 4.) 1903. Pp. 46–7.

Inside the terrace-wall, there were visible, before excavation, traces of (1) a cross wall DF, running obliquely to N.N.E. and abutting on a low natural crag of the ridge; (2) other cross-walls eastward and northward from B, and (3) a continuation of the terrace-wall northwards from A towards the precipitous edge of the site. The line along which the natural rock emerged from the accumulated earth of the terrace ran approximately from B to F; but east of the wall DF the deposit became rapidly shallower, and dwindled to a mere earth-filled trough in the natural rock about 3 m. distant at H. It was in this detached pocket of the terrace-accumulation that the knife of a small shepherd girl had turned up recently, close below the turf, the little series of clay figures of animals, which first called attention to Petsofà.

Under these circumstances, the plan of attack was obvious.[1] While three or four men started at H and worked westward through the deepening deposit towards the face of the wall DF, others struck down along the back of this wall and along the rock line westwards from F.

The space DFH was soon exhausted. Clay figures, of most of the types to be described hereafter, appeared at all depths, and at 30 cm. or more back from the face of the wall there was an ill-defined patch of a darker colour. But it soon became clear that the wall DF was of later construction, and had been carried down to the rock through the terrace-earth in such a way as to disturb any stratification which might have existed originally; and the same result was obtained in the first stages of the works behind the west face of this wall. When, however, the working face of the trench had advanced a metre or so north-westward, and away from the wall DF, three distinct layers became clear, and were found to extend over the remainder of the site.

(*a*) The surface earth was the ordinary brown loam of the limestone region, with many small stones and shattered pottery and figurines. Its depth ranged from 40 to 60 cm., the variation being explained by the slight southward slope of the surface.

(*b*) Below this came a layer 17–20 cm. thick, and almost horizontal, of nearly black earth—slate-grey when dry—full of ashes and fragments of

[1] I take this opportunity of thanking the Director of the British School for the unexpected chance of examining the site; the ready help of Messrs. Tod and Dawkins in all points connected with the excavation; and the further elucidation by Messrs. Dawkins and Currelly of a large number of points of detail both on the site itself after my return to England, and in cleaning and sorting the objects from Petsofà after their arrival in the Candia Museum.

charcoal, and crowded with figurines. The latter were evidently undisturbed since the deposit was completed: for a large proportion were whole, and many of them still retained their surface-colouring. This black layer had, in fact, every appearance of having originated in a large bonfire, into which the figurines had been thrown. The broken condition of many of the smaller figures might, of course, be due to accident and the heat of the fire; but the total absence of any bodies belonging to the feet, horns and other extremities of larger figures (p. 376 below) can only be explained by supposing that from time to time the bonfire became clogged with such larger figures, and was raked over and roughly purged of them; the smaller objects and the fragments of the larger figures being left among the ashes, and the whole layer levelled for the reception of fresh fuel and figurines. Close parallels are offered by the condition of the Zeus altar at Olympia, and of the burnt layer in the Principal Sanctuary at Idalion;[1] and by the size and form of such fire-rakes as those from Tamassos, which, though of later date (vii–vi cent. apparently), seem to have been used for this same purpose.[2]

(*c*) Below the black layer came a thick bed of clayey earth of a strongly reddish colour, brightest at the top, and merging, downwards, in the ordinary colour of the surface-soil of the limestone-region. This layer seemed to go down to the rock at all points, and could be traced, outside, underneath the terrace-wall. It doubtless represents the original packing of earth to level the enclosure; and in that case its red colour is due to prolonged baking by the bonfire on its surface. No figurines or pottery were found in this bottom layer.

2.—THE LATER BUILDING.

About four metres west of the wall DF, and about one metre south of the rock-line, the workmen struck on the edge of a broken floor of rough unshapen slabs of schist, which soon gave place south-westwards to a plastered and whitewashed mud-floor of the common Eteocretan type. This latter was found to extend, with a broken edge, obliquely as far as the

[1] Unfortunately still unpublished except quite summarily in the *Times* of 7 Nov. 1894, and the *Daily Graphic* of 28 Dec. 1894: but I had the good fortune to see the section, when the site was about half excavated, in the summer of 1894.

[2] *Cyprus Museum Catalogue*, No. 3930: Ohnefalsch-Richter, *Kypros*, Pl. ccxiii. 5.

main terrace-wall CD, sealing down the lower layers completely beneath the floor-level of some later structure.

The character of this later building was not easy to make out, for except in the S.W. angle of the site almost every trace of it had disappeared. The S.W. angle itself was occupied by a nearly square chamber three metres from north to south, and somewhat more from west to east. In the latter direction, however, the destruction of the floor and the disappearance of the original north wall left its exact proportions in doubt.

Round the wall of this chamber, at an average height of 25 cm. from the floor, ran a rough bench of unworked stones, made good with plaster, and whitewashed like the floor. Similar whitened plaster could be traced here and there up the walls, which were preserved for an average height of half a metre above the bench.

The north wall of the chamber was interrupted at a point 2·60 m. from the N.W. angle, by a doorway, set back nearly half the thickness of the wall, and communicating by two steps in the thickness of the remainder with the next room northward (No. II.), the floor-level of which was at least 35 cm. above that of Room I. The absence of a plaster floor, however, prevented any very exact measurement.

East of the doorway, the north wall of Room I. seemed either to have been entirely rebuilt, or to have been originally of only half the thickness of that beyond the western jamb. The former alternative seems preferable; for (1) the jamb-stone itself (M) looks like the original jamb-stone turned round and remodelled; (2) the last stone (N) which is preserved eastwards in this wall is a cylindrical base or drum of a column (14 inches in diameter), which cannot have occupied its present position originally; (3) this drum, and apparently also the stones west of it, rest on the surface of the pavement of schist slabs above mentioned (p. 358), and this pavement ends westward at the point where the bench and the plaster floor of Room I. begin. Probably therefore the wall KL was originally the whole side of Room I., and ended at L in an *anta*, beyond which began the schist-paved court: then, subsequently, Room II. was prolonged eastward at a higher level, and the wall MN was added on top of the pavement; communication between Rooms I. and II. being maintained by means of the door LM, of which the *anta* L now became one of the jambs.

Of Room II. almost nothing is preserved. Its north wall, which prolonged the wall AB eastward, and lay 2·15 m. north of the wall KL, was

almost wholly destroyed, for only its western end lay below the line where the rock reaches the present surface.

There seems, however, to have been a third room, north of Room II., for the wall BC is produced northward ; but as almost the whole of this area lies above the soil-line and must have had a floor of made-earth, every trace, except a couple of wall-stones, has been denuded away long since ; and the same applies to the larger area north of the wall AB.

The date of Room I. and the rest of the later building is given approximately by the character of the bench and the plaster floor, which resemble closely the common work in the houses at Roussolakkos, and should therefore be of Late Minôan or Early Mycenaean period. The schist slabs also are used in exactly the same way as at Roussolakkos. The only object which was found in Room I. was a rough pedestal lamp of serpentine or similar material, about 20 cm. high, and of rude workmanship ; but its evidence, such as it is, agrees with the date suggested.

It results from this, that the burnt layer, which lies sealed down by the floor of plaster and slabs, must be of yet earlier date ; and with this the character of the figurines agrees, as we shall see. The interval, however, between the two strata of occupation does not seem to have been a long one, for there was no trace of a vegetation surface between them ; and under these circumstances the superposition, on a site formerly sacred, of a building which is indistinguishable from the domestic buildings of Roussolakkos, seems not a little peculiar, and could hardly have happened if the site had retained any sanctity in the eyes of its later occupants.

3.—THE DEPOSIT OF VOTIVE FIGURINES.

The clay figures from the black layer deserve more detailed description. Three varieties of clay can be distinguished :—

(*α*) The first is a buff or cream-coloured clay, of a fine dusty texture. It is the *débris* of the late clayey limestones of the Palaikastro valley, and resembles the clay of the local Minôan (Kamáres) pottery of Roussolakkos. This is the clay which is used for the great majority of the figures ; and it is susceptible of much greater delicacy of modelling than either of the others.

(*β*) The second is a rather coarser and more sandy clay, which burns bright red, and may be only a levigated variant of the third ; but it

resembles rather the *κοκκινὸ χῶμα* of the limestone region towards Karoúmes and Zakro.

(*γ*) The third is a quite coarse clay, full of fragments of the schistose basement beds, which crop up in the northward-draining valley immediately to the west of the Petsofà ridge. It is naturally buff in colour, but burns easily to a bright red. Though its texture is so rough, it is the figurines in this clay that exhibit most of the variants of modelled detail: *e.g.*, the male figure with modelled loin-cloth, Fig. [6].[1] Most of the large-sized oxen (p. 376), of which only feet and horns are preserved, were also in this clay. Mr. Bosanquet suggests to me that the figurines in clays *β* and *γ* are of later fabric than those in clay *α*; but I am not clear on this point.

Most of the larger and better-made figures seem to have had a surface coating of some kind. The commonest (1) is a fine bright reddish-brown slip which is laid on rather thickly, and takes a good burnish, but easily scales away; then comes (2) the lustrous black paint of the 'Kamáres' style of vase-painting, which is much used, on clay *α*, for male figures, and rarely also for animals. Finally, (3) for the flesh parts of female figures and for details superimposed on the black or brown surface of the men we have the hard dead-white chalky paint which belongs also to the Kamáres style. On the white, details are given both in the lustrous black and in a bright brick red which may very well be of the same character as the red slip (1) already mentioned.

This scheme of colour-decoration goes far to fix the relative date of the deposit, and to assign it to an early stage of the Minôan period, and this agrees well with the position of the deposit below the floor of a building which is apparently itself of the style of the ordinary houses of Palaikastro.

The types of the terracotta figures are as follows:—

4.—HUMAN FIGURES, MALE.

These range from 17 to 10 cm. in height; with one larger example in clay *γ* (Pl. X, [6]) which measures 12 cm. from shoulder to knee and so must have stood about 22 cm. high. A few, which are quite perfect, stand on small round bases 3·5–4 cm. in diameter [1. 7];

[1] The numerals in square brackets, thus [6], refer to the figures in Plates X–XIII.

and a number of similar bases, both round and square, were found with the feet attached. The round ones range from a large one, in clay γ, of 9 cm. diameter to a finely painted one, in clay α, of 3·5 cm. with black surface, white feet, and a number of vertical bands in white down the edge [12]. The square bases range from 7 to 3·5 cm. with one fragment of a much larger one with a raised rim [14]; and a fragment of a long one ([13] in clay α with brown slip) with the feet of three figures, set at intervals of 5·5 cm. along its edge, with the toes pointing inwards. The last-named fragment suggests a square ring-dance, of the kind which is familiar on Cypriote sites;[1] and it is noteworthy that one example occurs at Petsofà of a tree-like object [73], like that which forms the centrepiece of the Cypriote rings.

The figures all stand erect, with the feet usually close together; the legs slightly bowed—this may be due to technical difficulties;—the waist very narrow; and the shoulders broad and well thrown back. The arms are almost always extended to the elbow at an angle of about 60° with the trunk; the forearms are tightly flexed (as in the great relief-fresco from Knossos, *B.S.A.* vii. Fig. 6), and the hands pressed closely to the body between the shoulders and the breasts. The less finished figures shew a loop at the elbow, and raise the upper arm to 90°. In no case does the hand appear to be otherwise than tightly clenched. A few variants occur: one small broken figure (clay α, paint 2) presses the right hand on the chest, and raises the left to the head: another (clay β, paint 1) presses both hands on to the belt, a little to the right side; a third—the large figure [6] in clay γ, already mentioned—holds the right arm flexed according to the type, but lets the left hang loosely by the side.

The numerous fragmentary figures betray the method of construction. The two legs were modelled in one piece, thigh to thigh, and feet outwards [5]; and the soles of the feet were fully formed. This leg-piece was then folded at the thighs [5], with the loin-cloth fillet laid in the groin, and the feet were pressed into their standing-base [1. 7. 12] and made secure by drawing the surface of the stand round them. Then the upper part of the figure, which was modelled separately, was pressed down upon the outside of the thigh fold a little in front, so as to leave the buttocks prominent; the body clay was squeezed downwards over the thighs in front [5. 9], and the

[1] *Cyprus Museum Catalogue*, Nos. 5288, 5290–5, 5297–8, 5305–34, 5401–66, and references *ad loc.*

loin-cloth fillet brought upwards into its place: then the belt, if there was one, was added to disguise the juncture. The larger figures had their arms and heads modelled separately, and attached by squeezing the clay of these appendages over the surface of the trunk fore and aft.

The costume is almost always limited to the Aegean loin-cloth and a pair of boots. The latter rise some distance above the ankle, and fit closely; being represented by paint alone. This brings them into line with the ordinary Mycenaean boot—*e.g.* on the bull-fresco from Tiryns, and on the Vaphio cups. The fact that they are uniformly painted white suggests that they were made of a white or a pale buff-coloured leather like that of the modern high boots for which Crete is famous locally. The toes are well pointed, and turned up slightly, again just like the modern Cretan boots. One of the detached legs [50] shews the heavy sole of the boot quite distinctly.

The loin-cloth appears to have consisted of three distinct parts:—the loin-cloth itself; a white wrapper or kilt (like that of the Keftiu in Egyptian representations), worn over it; and a knotted girdle which secured the whole. Each part of this costume was previously known from numerous monuments; but the statuettes from Petsofà permit for the first time a detailed explanation of it; and also add some fresh points of detail.

The loin-cloth itself is represented uniformly by a pronounced roll of clay which runs vertically downwards in front from the middle point of the belt, and disappears from view between the thighs: compare the costume of the small bronze figures from Psychro.[1] In the back view, as we shall see, no modelling was required, for the cloth fitted tightly and smoothly over the hips, but it may fairly be supposed that it rejoined the belt, and was passed once or more round the waist before the ends were fastened. In the majority of these statuettes, this simple loin-cloth is represented—either by paint or (in one example) by further modelling—as concealed beneath the smooth surface of the wrapper: but on the Kampos statuette the same garment[2] recurs without disguise, and here its disposition can be clearly followed. On the Kampos statuette the loin-cloth is first drawn round the hips from behind, and two corners are secured together in front, either to one another,

[1] Cf. *B.S.A.* vi. 107, and specimens in the Ashmolean Museum, quoted in the text.

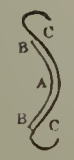
[2] Tsountas and Manatt, *The Mycenaean Age*, Plate XVII.

or to the belt, which is of the normal concave profile (*v.* below). Then the slack of the belt, which at this stage hangs down behind, is gathered together and drawn forward between the thighs ; and then upwards till it rejoins the belt, into which, in this instance, it is apparently inserted from above, and so made fast. In the more pacific of the scenes on the Vaphio cups the herdsman wears an almost identical garment : only in this case the cloth has a well-marked border and hangs a little loosely behind, and the fold in front enters the belt from below. But see also the note on p. 387.

Over the loin-cloth comes the wrapper or kilt. This is usually represented in paint only ; but fortunately one example, the larger figure in clay γ already quoted [6], gives the essential features in relief. It consists of a long rectangle (or perhaps a long truncated wedge) of cloth, represented always in white, with occasional indications of ornamental design in black paint ; and it was worn with one of the long edges wrapped tightly round the waist, and one of the short edges hanging vertically in front a little beyond and to the right of the median line, just concealing the central fold of the loin-cloth, like the lappet of a frock coat. When the other end of the loin-cloth comes back to the front round the right hip, its lower edge is always represented on a higher level than before [6. 7] : but it is not quite clear whether this is due to the garment being folded or tucked together, ready for fastening ; or whether, as Mr. Dawkins suggests, the wrapper itself was narrower at one end than at the other.

Finally, over the wrapper comes the girdle, represented, like the loin-cloth, by an applied fillet of clay. Unlike the girdle of the Kampos statuette, of the men on the Vaphio cups, and of the Knossian cupbearer, it shews no concavity of profile ; and does shew, often, clear traces of a knot with dependent ends [1. 7], which is usually placed in the median line, but occasionally on the right hip. In other examples the girdle is represented only in paint, and then shews a double strand, through the loop of which the free ends pass to form a slip-knot. No further trace of fastening is indicated ; and though such must have been present, the slip-knot scheme of the actual representation has its interest, as explaining how the slender waists, which are so characteristic of early Aegean people, were produced and maintained.

It should perhaps be noted, in passing, that the more elaborate and apparently claspless belts of the Knossian cupbearer and other larger representations betray in their outline the essentials of their structure. The



concave profile *a* is the belt itself, which from its colour, and thin edges, seems to have been a smooth plate of metal. Its out-turned edges *b–b* prevent it from chafing the body of the wearer; and this end is further secured by the torus mouldings *c–c*, which seem from their form to represent a padded cushion-like belt of some elastic material, which enabled a very considerable pressure to be applied either by means of the metal belt itself, or by a tightly drawn lace or thong wound closely upon its concave surface. In the latter case the smooth ends of the metal belt would slide over one another as the pressure was applied; and this would explain the absence of any sign of a metallic catch, and also the presence of a lace outside the metallic belt. The loose-looking swollen belts from the shrine of the Serpent-Goddess at Knossos (*ante*, p. 83, Fig. 58) very likely represent the cushion *c–c*: which again seems to be represented in the small wreath-like objects to be described below (p. 378).

Outside the belt, in front, several of the Petsofà figures wear a large dagger, which measures, together with its hilt, about the length of the wearer's forearm [1. 7. 8]. The dagger is worn nearly horizontally, with the handle usually slightly raised towards the right hand; or occasionally somewhat depressed. The structure of the dagger can be made out fairly clearly. The blade is triangular, and very broad at the base; an Aegean fashion, which is characteristic of the Early Cycladic and Early Minôan period, and disappears later as greater skill is available for the production of a longer and narrower blade. The hilt is represented as of the same type as that on a cameo from Knossos (unpublished), with a distinct pommel, and broad crescentic attachment for the blade.[1] One painted example gives, in white paint, the edge of a tang, where it would emerge between the flat handle-plates, together with one rivet-head on the grip, and an oval ring on the hand plate, which doubtless represents briefly some form of decorative inlay, though its exact meaning is not clear.

One figure [4] wears a bracelet, in relief, on each wrist, and one of the severed hands [42], to be noted below, has a bracelet painted in white.

Only one male figure shews any further clothing at all. It is executed, like most of the aberrant examples, in clay γ, and is much damaged about the extremities, but the essentials of the garment are clear. Fig. [11] gives the back-view. It consists of a sort of wrapper, in relief, the long ends of

[1] Compare also the Keftiu sword noted by Mr. Hall, *B.S.A.* viii. p. 171, Fig. 2.

which cross on the breast, pass over the shoulders, and either meet or cross on the back, where the garment seems to end below the waist. The hood worn by the Kampos statuette would seem at first sight to be a similar garment, girt much more tightly round the neck. On the figurine, however, there is also a tail-like appendage over the buttocks, which may be part of the same garment ; and the ragged surface of the flanks suggests that the long ends which cross in front may have passed backwards over the hips and met to form this appendage. It is, however, possible that this appendage is the continuation downwards of the shoulder bands after their crossing on the back, and that the ends which pass from in front under the arms are continuous *over* the shoulder bands and their prolongation, across the small of the back. In this case the garment would present very close analogies with the Scottish plaid,[1] which is first wound round the waist, and then has the ends crossed in front, brought over the shoulders, crossed again on the back, and secured by being tucked through the waist-folds, so that the ends hang down like a tail.

The painted examples also shew (1) a broad necklace in white, (2) a bracelet (on the detached hand, [42]) in white fastened by a loop which passes over a button. The button is in relief, and the thick white engobe raises the surface slightly for the loop also. This actual representation of a button-and-loop fastening has an obvious bearing upon the problem of Aegean dress.

The figures, though small and rudely finished, are modelled in a vigorous and lifelike manner ; and the larger specimens betray considerable observation of the natural form. The same is clearer still in the detached limbs described below, and in the few fragments of larger figures in clay γ.

The head, as usual, presented the greatest difficulties. Aegean tradition dictated an upturned face, low forehead, and prominent occiput ; but the nose is here well marked and slightly aquiline, and the chin long and pointed : compare the Amorgine marble head, of more advanced style, in the Ashmolean Museum. The orbits are rendered, as usual, by pinching the clay on either side of the nose into large, shallow, saucer-like depressions ; and the eyes are rendered either by pellets in relief [2], by a further depression in the centre of the orbital hollow [3. 6], or, without any modelling, by a white ring on the black surface [1. 4. 37]. This last method

[1] I owe this suggestion to Mr. W. L. H. Duckworth.

conforms exactly with that employed in the human figure from Kamáres,[1] and agrees with the inferences already drawn from the general style of the painted decoration. The ears, rendered by pellets in relief, are large and rather prominent [5. 37] ; but a distinct attempt is perceptible sometimes to render their true form by a crescent-shaped pellet with central cusp on the concave margin [1. 3]. Compare also now, for greater detail, the 'fisherman' from Phylakopi (*Phylakopi*, Pl. III.).

The treatment of the hair varies. Many figures have no special indications ; others have one, two, or three bun-like discs, set along the median line from the forehead to the nape of the neck [1. 3. 6] ; and one head, whose eyebrows and nose have been emphasised with a knife, and which has a slit cut for the mouth, has a long scalp-lock coming forward from the vortex and falling slightly to the left side [2]. The chin of one figure seems to have been intentionally depressed, and may have been meant to show a beard.

5.—HUMAN FIGURES: FEMALES.

The normal type of the female figures, which are much fewer than the males, is bell-shaped or conical from the waist downwards, to represent the full skirts of Aegean costume. This part of the figure, which usually stands about 8 cm. high ([21. 24] cf. Pl. VIII, full size), seems to be wheel-made, and has nearly the form of the common beaker-type of Palaikastro, but baseless and inverted. Sometimes it has a flat inward rim for strength ; and in one example [28] it has a distinct torus-moulding round the apex.[2] Into this apex was thrust the upper part of the body, which was moulded separately, and ended in a long peg [22] for securer junction with the skirt-piece. Some of these skirts shew traces of brown, black, or white surface-colour : the most elaborately decorated example is given in Pl. VIII ; another has white vertical bands on a brown surface ; and another, horizontal white lines across the hips, on black. The larger coarsely-modelled fragment [27], in clay γ, shews an overskirt, with a flounce or lappet emerging from beneath it, and one pendent end of a belt, and thus recalls other features of the Knossian costume.

The upper part of the figures is of somewhat remarkable construction.

[1] *Proc. Soc. Antiq. Lond.* II. Ser. xv. Pl. II. 2.

[2] I think it is very likely, from the clean modelling of this waist-belt, that this may have been a votive skirt of the same class as the votive dresses of the Knossian deposit (*ante*, p. 83, Fig. 58).

It was built up as follows. A lozenge-shaped plate of clay was made, to represent the bodice of the dress; and its two lateral angles were drawn out to form the arms. The head, modelled separately with a long stalk-like neck, was then laid face upwards on this plate, along its longer diameter. Then the margins of the plate, below the level of the arms, were drawn forward, like the spathe of an arum-lily, to enfold the lower part of the neck, and so to form a thicker stalk or peg for insertion in the apex of the skirt-piece. The junction was smoothed over by squeezing the body-clay downwards over the upper part of the skirt, and sometimes a heavy fillet of clay [23] was added, over all, to represent the padded girdle. Independent models of the girdle were found, as at Knossos (p. 83), and will be noted below ([32, 33], p. 378). The junction of neck and bodice was similarly remodelled, and disguised by the addition of pellets of clay for the breasts [21–24]; and finally the arms were brought forward rather above the horizontal line [22]. Probably the hands met in an attitude of adoration, like those of the Cypriote statuettes, of which further mention is made below (p. 372); but unfortunately, in this extended posture, they were exposed to risks, and no complete example has been recovered. The result of the whole is a representation of a loose open corsage, about 4 centimetres high from waist to neck, enveloping the breast from the shoulders downwards, but displaying the whole neck, and the upper part of the bust, within a wide standing-collar of the 'Medici' type which rises to a high point at the back of the head: and it recalls at once the squarer standing-collars and epaulettes of the seated ladies in the miniature frescoes of Knossos.[1] Several fragments shew traces of paint on the bodice.

More elaborate painting than anything actually found at Petsofà is represented on a very similar terracotta from the settlement-site at Phylakopi in Melos. This example I am enabled, by the kindness of Mr. Bosanquet, to represent in Fig. 1 (*a*, *b*, *c*) herewith. In *a* we have the front view of the upper part of the body, with stumps of neck and arms (which are bare), and a large and regular round opening between the latter, which looks as if it may have been the mark of a vase: Mr. Bosanquet suggests that the whole figure formed an anthropomorphic vase. The peg-end of the neck projects into the interior, and can be seen

[1] Candia Museum: the majority are unpublished still, but examples will be found in *J.H.S.* xxi. Pl. V. and *B.S.A.* vii. Fig. 17. Compare also an unpublished Cretan terracotta, of a form very like [24], in the Ashmolean Museum.

in the drawing. In *b* is represented the back view of the same fragment, with a grand Minôan device of white lily-petals and cross of red (*shaded*) and orange (*dotted* in the drawing): and in *c* we see a portion, apparently, of the skirt of the same or a similar figure with elaborate zig-zag pattern in white and orange, with an orange braid or trimming over all, and traces of a vertical gore or seam-braid.

A few variants occur, which throw some light on the details of the costume. One fragmentary figure has one arm brought back into the same attitude as the arms of the men, with the hand drawn back between breast

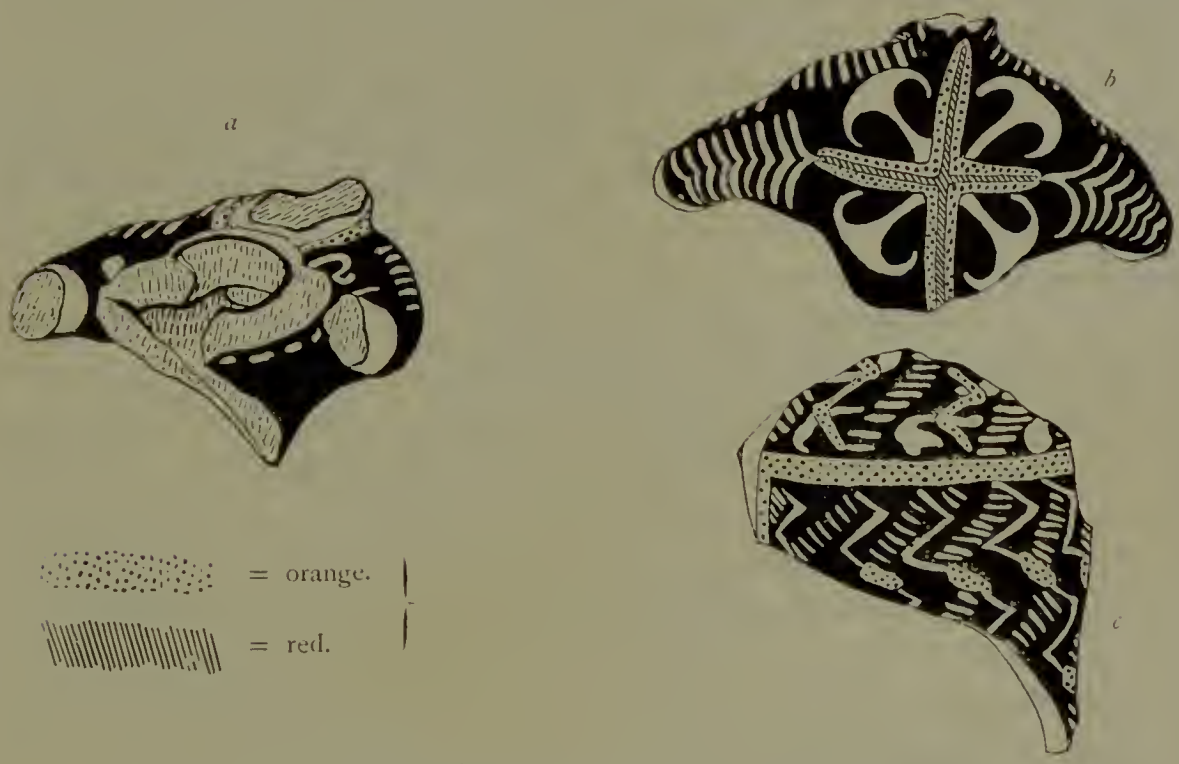


FIG. 1.—PAINTED MINÔAN FIGURINE FROM PHYLAKOPI IN MELOS.
(*For comparison with the female figures from Petsofà. From drawings by Dr. Bagge.*)

and shoulder. Another [23] shews by the course of the free front edge of the bodice that this garment was not a mere wrapper, but a sort of 'zouave' jacket with sleeves; for the free edge closely envelopes the breasts and is pressed open by them, while it is confined at the waist by a substantial girdle, knotted in front, and falling in long ends over the skirt. The stumps of the broken arms, meanwhile, can be seen, well away from the hem; and the same is clear, as the red patch shews in the example in Pl. VIII. An identical garment is recognisable in the central figure of the

gold pin-head from Shaft Grave III.;[1] in the bronze figure from the Troad,[2] which shews well a fresh variant of the standing collar; and (in far more realistic detail) in the glazed figures from the Knossian deposit, pp. 75 *foll.* Figs. 54–57, where one can see the tight-fitting sleeves, ending half-way above the elbow, and even the lacing of the bodice. In the same example, also [23], the left arm, instead of being raised, is brought round on to the right side of the girdle, above the hip, where a fragment of the hand remains in place. The same variant occurs in one of the male figures already described. If now, as seems probable, the right arm was represented raised in the normal posture, the pose of the figure would be very nearly that of the bronze already quoted.

One other fragment, with arms well raised, and the bodice-collar drawn very low, is certainly represented as pregnant;[3] the rest, eight examples in all, have the ordinary contour and pose of Mycenaean women.

The faces of the women, *mutatis mutandis*, resemble those of the men; but instead of the brown or black paint they have usually traces of a dull white surface on the flesh-parts; while the eyes are indicated, if at all, by a black dot on the white ground, with or without a black eyebrow over it. The lips also are sometimes indicated; and once, quite clearly, with *red* pigment. One detached head is executed wholly in a white chalky clay which does not appear otherwise on the site, and may be a lump of the white pigment; and it is probable that two brown-surfaced examples have merely lost or omitted the white paint appropriate to their sex: for a number of similar examples wholly covered (like them) with a dense layer of the dark pigment bear clear traces of a superposed layer of the white.

The most noteworthy feature of the female figures, however, is their head-gear, which is very peculiar, and I think quite unparalleled. It is a kind of oval crownless hat, rather like the 'plate-hat' of recent fashion-books (1902–3), which is attached, far back on the head, by its hinder margin, and sweeps forward above the forehead in a high curve not unlike that of a short broad shoe-horn, convex side forwards and downwards, with its lateral margins slightly recurved so that its upper and posterior surface

[1] Schliemann, *Mycenae*, Fig. 392; better drawn in Tsountas and Manatt, *The Mycenaean Age*, Fig. 67.

[2] Perrot-Chipiez, vi. Fig. 349-350.

[3] Compare the statuette from the Argive Heraeum, *Exc. Am. Sch. at Heraion* I. Pl. VIII. 6.

is slightly concave (see Fig. 2). The effect is sprightly and not ungraceful; and as the hat often rises to nearly twice the height of the face which it adorns,[1] the original must have been a 'creation' of some splendour. Proportions and curvature varied *selon la mode;* and, for the artist at all events, the more pronounced the coiffure, the less refined need be the features beneath it.

FIG. 2.—MODERN HATS IN THE MODE OF PETSOFÀ.

In the normal examples, there is no clear demarcation between the hat and the head; and as the painted ornament of the figures in Plate VIII. will shew, the same pigment is employed for the body of the hat and for the indented border which limits the face. It might therefore be argued that we have to deal rather with a coiffure than with a hat; and abundant examples could be quoted of even bolder triumphs of hair-dressing. But the variants which are described below seem to connect the normal and most characteristic type with the well-known later series of Mycenaean women's hats: and the occurrence of elaborate head-gear, though not of this pattern, among the Knossian deposit, makes the hypothesis of a hat more probable at present. A very similar head-dress is shewn on a gem from the Italian excavations.

Whether hat or hair, however, the painted ornament gives a fair idea of the trimming. One example [19], on a black ground, has two broad horizontal stripes of white on the frontward surface: another, on brown, has two white concentric rings on the concave upper side: and a third, on an upper surface of black, has white rays diverging from the centre, and large white dots round the rim.

Three very distinct variants are represented by single examples. One lady [16] has crimped the brim of her hat, and added three large rosettes, represented by pellets, in the recesses thus formed beneath the brim. She has also decorated the upper side, along the longer diameter of the oval, with something between a plume and a frill, which has fairly puzzled the coroplast: it may perhaps be allied to the sinuous tail which emerges from the turban-like hats of the late Mycenaean women and

[1] The head ranges from 1·5 to 2 centimetres high: the hat from 2·5 to 3 centimetres. See [18. 19. 36] and Plate VIII.

sphinxes.[1] This hat is an 'arrangement in white,' to judge from the remains of the painting.

The second variant [17. 20] shews a less fanciful type, worn much further forward on the head, and suggestive of a funnel-shaped *polos* like the late Mycenaean head-gear already mentioned ;[2] which is itself, in turn, ancestral, probably, to the *polos* of the Boeotian figurines. This figure has also large eye-pellets and a long, deeply pinched nose-ridge, like that which, later on, determines the technical tradition of the figurines of the Argive Heraeum.

The third variant [15] is equally instructive. The hat is worn fairly well forward, as in the last example, but the brim is turned up all round so as to form a deep bowl ; the fantastic peak of the normal type surviving in an anterior lip like that of an oinochoe, or of the saucer-lamp of early Cyprus. Here we seem to have a very early analogy, and perhaps even the prototype, of a rare group of Cypriote votive figurines of the Iron Age,[3] in which a female figure bears a regular saucer-lamp on her head. Yet the lamps of these figures have never been used as lamps, and the figures themselves, apart from their peculiar head-gear, are identical with the large class of votive figurines in association with which they occur : they usually carry tympana or votive offerings like those described below, and certainly are not primarily *lampadephoroi.* If, however, these lamp-like hats were revivals, either in ritual or merely in votive tradition, of a lamp-like hat of Mycenaean and earlier date, we should obtain at the same time an explanation of these Cypriote figurines, and also an interesting addition to a group of analogies to which we shall have to recur later on. The wearer of this lamp-like hat at Petsofà was modelled in clay γ, which we have already seen to be liable to give variant forms ; she has almost no collar —only the rising point behind ; her ears are transformed into large round pellets[4] high up on the lower margin of the hat ; she has traces of the concave Mycenaean girdle ; and her arms trend more outwards and downwards than usual, as if she were carrying some offering ; which would

[1] *E.g.* Perrot-Chipiez, vi. Fig. 389, 416-8, 428^{22}.

[2] *E.g.* Fresco from Mycenae, Ἐφ. Ἀρχ. 1887, Pl. 10 ; ivory sphinx, Mycenae, Ἐφ. Ἀρχ. 1887, Pl. 13 ; cf. 1888, Pl. 9^{13}. Terracotta, Amyklaion, Ἐφ. Ἀρχ. 1892, Pl. 4^{5} ; cf. 1888, Pl. 9^{16}. Boeotian relief vase (with two foliage plumes) Ἐφ. Ἀρχ. 1892, Pl. 9.

[3] *J.H.S.* xvii. p. 166, Fig. 15^{9} (Cyprus Museum) : = *Cypr. Mus. Cat.* No. 5540, cf. p. 153 : other examples in Ashmolean Museum (unpublished). The series probably ranges from the viii. to the vi. century.

[4] Possibly meant for earrings.

supply a further analogy with Cypriote forms, and is confirmed by the occurrence, as noted below, of fragments of such offerings at Petsofà; and by the scars of attachment, on the front of the body of this figure. Another fragment of a woman in clay γ shews points of similarity with this figure, but the head is missing.

Another female type of much meaner pretensions is represented by a very few examples [24]. The skirt has sunk to be a mere trumpet-like base; the peaked collar is gone, and the body is a mere rude column with stumpy arms, recurved on the breast, when they are preserved. The face is a mere serrated ridge; the hat a simple disc, degenerate from our second variant above; and there is no trace of paint. Here, in fact, we have the lowest term of the series, when the significance of the prototype is almost lost, but when the Mycenaean art of a later age has not yet taken up the meaningless base or head-piece to transform them into the purely conventional 'bird-faced idol' of Mycenae, Tiryns, and other sites on the mainland; the ancestry of which has been hitherto quite obscure, but to which this group of little figures seems to supply an archetype.

6.—HUMAN FIGURES, SEATED.

The male and female figures already described all stand erect: but there is a small class of seated human figures of which the sex is not clear; and these may be described conveniently now. One of them [26], very fragmentary, in clay β, sits in a high-backed chair, which has almost crowded away the arms; as the stumps of the legs are distinct, it is probably male: the legs of the chair and the head of the figure are missing; another, however, which shews the legs, has a female bust, and white surface. Another, in clay α, sits, with legs wide apart, on a four-legged chair, of which the back is missing; it has good black surface, with traces of white paint. Another, [25] separated from its chair, wears a long white-painted garment from head to ankles: the feet are formless, and project in the line of the thighs; head and arms are missing.

A single example occurs also of a roughly made female bust—head, arms, and skirt missing—in clay γ, with white slip all over, and without trace of the peaked collar; apparently therefore nude, so far as it exists; unless, as is probable, we may assume the presence of the skin-tight vest

which seems to be present in the glazed figures from the Knossian deposit.

With the seated figures may be reckoned a few detached chairs and fourlegged stools [77–9]: one stands on a square base, and another base [79] shews traces of a similar chair; one has a modelled seat like that of the Throne at Knossos; but this may be merely the result from the pressure of the figurine. All (except the damaged example [79]) have the legs widely splayed outwards on the sides, and have the seat short from front to back, like that of a campstool.

7.—VOTIVE ARMS, LEGS, AND HEADS.

One of the most marked peculiarities of Petsofà is the series of detached arms, legs, and heads, modelled separately, and often perforated at the butt-end for suspension. The arms are usually given from the shoulder downwards, extended or somewhat flexed: they are coloured either white (probably for women) or brown-red or black (for men); and they measure from 8 to 12 cm. from shoulder to finger-tip. One white one [41] includes, besides the whole arm, a full quarter of the trunk, and its suspension hole is at the angle of the latter nearest to the place of the neck. Others represent only the forearm; and one black one [42]—which seems to have telescoped the whole arm, and indicates an elbow close to the wrist—has a large, vigorously modelled hand, and on the wrist a button in relief, which fastens the white-paint bracelet already mentioned (p. 366). Another white specimen [44] gives only the hand in full (4 cm. long), but still retains a slight projection about 5 cm. from the finger-tips, which seems once more to represent the elbow joint, and so the whole arm. Two smaller expanded hands [45] with thumb well turned back as on the Kamáres potsherd (*Proc. Soc. Ant. Lond.* II. Ser. xv. Pl. II. 2) may be from whole figures, as their other extremity is broken; but, as is noted above (p. 362), all the figures which preserve their arms entire seem to have their hands clenched.

The legs range in size with the arms ([49–51]: thigh to heel 8—11 cm.) and are always fully extended, as if standing. One complete pair was found [48] (besides fragments) terminating in a waist, and formless trunk, about 2 cm. high. The legs are coloured like the arms; and one black-surfaced specimen shews a white boot like those of the statuettes; an-

other [50] shews well both sole and heel, separately applied ; and another [49] seems to indicate the toes. In one case a detached foot may have been intended to be independent ; but a rounded socket in the ankle suggests that it was merely fashioned separately and has been insecurely fastened to its leg.

One example was found [47] of a trunk shewing stumps of legs, and a loin-cloth in relief: it was in clay γ, and much damaged. Among the many detached heads which were found, there seemed to be a distinct class which had been so modelled originally. These votive heads [36–40] are all of small size from 1·5 to 2 cm. diameter—and very rudely modelled. Some have shouldered busts ; but, in others, the neck tapers away for about 1·5 cm. into a sort of wedge [36–7], or in the smaller examples into a mere peg [38–40]. Both male and female examples occur, and the latter [36] are distinguished as usual by their hats.

8.—LARGER HUMAN FIGURE.

Close to the surface, in the rock-cleft H, at the east end of the site, was found the only fragment of advanced style which emerged in the course of the excavation. It is part of a human face [34], modelled by hand in clay γ, with traces of a coarse, red-brown surface ; and it preserves the left eye, the nose (damaged at the tip and over the left nostril), and part of the left cheek. The height of the nose from root to base is 6 centimetres ; and the extreme length of the eye 3 centimetres nearly. The eye is modelled with heavy upper and lower lids, almost symmetrical, and completely separated by an incision at each end ; and the pupil is oval, flattened, and somewhat prominent. The nose rises abruptly from the face, with nearly flat sides, to an acute ridge which ran up boldly between the eyes to join the brows, the beginning of the curve being nearly ·5 centimetre higher than the axis of the eye. The tip is only very slightly bulbous, and its vertical angle is about 90°. It is highly tilted, the length from base to tip being 3·5 centimetres, and from tip to root 4·3 ; allowing in both cases for the damaged tip, and measuring to the intersection of the outlines which are preserved. The nostrils are but slightly expanded : the outline from bridge to lobe being even slightly convex : and the outer margin of the nostrils came originally almost as low as the inner. The space from nose to lip must have been considerable, as nearly 1 centimetre width is preserved, with very slight outward curvature at its lower edge. All these

points combine to separate this figurine from all the orientalising schools, and to make it probable that we are dealing with a *chef-d'œuvre* of approximately the same date and style as the rest of the objects in clay γ.

9.—Animals and Miscellaneous Objects.

By far the most frequent figurines on the site are representations of animals. These fall into two main divisions; (1) large figures of oxen, preserved only in fragments; and (2) miniature figures of various domestic and other animals in a 'snow man' style, ranging from 3 to 7 centimetres in length.

Of the large oxen, only horns [81] and legs [82] were found, and one or two fragments of hind-quarters. The horns ranged from 12·5 to 5 centimetres in length, and were all of the same slightly curved and twisted type as those of the modern Cretan cattle; they had been moulded separately, and attached imperfectly to the head. The legs also had been moulded separately, and very ill attached to the trunk: with the exception of one doubtful example of 13 centimetres length by 7 centimetres greatest breadth, their dimensions ranged from 13 centimetres to 6 centimetres from hoof to the junction with the body; and from 6 centimetres to 3·5 centimetres diameter at the latter point. All fabrics are represented; but the largest specimens are in clay γ, and the best modelled, which were of about medium size, are in a variety of clay α, with black surface, white hoofs, and in one case a white rosette on the outer surface of the leg. Another well-marked variety, of rather slenderer proportions, is executed in clay β, and covered with a white surface. Detached legs of oxen, apparently modelled singly like the human legs above mentioned, were found occasionally; but the majority of the legs were broken from figures of whole oxen.

The almost complete absence of the bodies of the oxen may perhaps be accounted for by periodical removal of the larger and less recognisable fragments from the place of deposit: the horns and legs of oxen thus constructed would be among the first fragments to become detached, especially if they were exposed, as is probable, to heat in a sacrificial fire; and without these appendages the trunks would not be easily recognised, in the ash-heap, as objects of any use or value. Search was made in the neighbourhood of the shrine for traces of a rubbish-heap of such bodies;

and subsequently Mr. Bosanquet found fragments of such bodies below the rocks immediately on the north side of the site.[1]

The miniature animals vary in detail, between easily recognisable types. Oxen, with horns either straight or curved, were the commonest [53]; *agrimi*, goats [58] and rams [54] were recognisable by their horns; swine [57] by their bristly crest; and dogs [55] by their prick-ears, long slim body, upturned tail, and legs extended fore and aft as in running [55]. Another animal [56], with long neck and tail, pointed nose, prick-ears, and a peculiar kink in the body, was variously identified by the workmen as cat, fox, or weasel.[2] Another group seemed to represent a crouching hare, with three variants; one ([60] 5·5 cm. long) in which the ears are united in a long backward curving horn; one ([63] 3 cm. long) in which the ears are diminished to a small pellet on the back of the neck, while the body has three longitudinal furrows; and a third, in clay γ, and of larger size (8·5 cm. long [62]) and hollow, in which six incised lines radiate from a point behind the shoulders, and two short lines cross the top of the head. The head has a short broken horn, and the hind foot is punctured as if to indicate digits: the snout is slightly upturned. I am not quite sure whether this[3] may not perhaps be a hedgehog (*ἀγκαθόχοιρος*). Tortoises are represented by several quite recognisable examples [61]. Birds occurred rarely [59], of the common votive type with outspread wings and three short feet; one of them had the wings reduced or closed; and another, in clay α, has good black surface, and traces of white paint. A few of the quadrupeds also shewed traces of black or white surface; and one goat was painted, the front half in red, the hind quarters in white. One or two variants occurred, such as a crouching pig without legs (3 cm. long), and a recumbent calf [72], modelled rudely but with some spirit, on the lower side of which were traces of two strap-like supports. Probably this calf has been detached

[1] It is perhaps worth noting that an obscure fragment [76] bought at Palaikastro, and said to have been found formerly on the surface at Roussolakkos, turns out to be the ear of a similar ox of large size, excavated in clay, with black and white surface-paint, and a long nick or owner's mark indicated in relief down the lobe. Mr. Bosanquet has also found a complete ox of this type on a rock-brow near Epano Zakro, together with votive human legs of the kind described above.

[2] Probably the *ζουρίδα*, a polecat or stoat, the fur of which is in some demand in the towns now: or perhaps the smaller *καλογενοῦσα*, which Mr. Bosanquet tells me may be a weasel. The fox does not occur in Crete now.

[3] And perhaps also the second type [62–3].

from a large human figure, which carried it as an offering in its arms: compare the series from Kamelarga[1] and numerous isolated examples.

10.—OTHER VOTIVE OFFERINGS.

That such figures, carrying offerings or attributes, were in use at Petsofà is clear from the following further examples:—(1) a dish [64], on a high twisted foot of indeterminate form (3 cm. high), broken away below, and bearing three long loaves or other offerings on its upper surface.[2] The distortion of the foot is due, as in the Cypriote examples, to the mode of attachment: the offering being modelled separately, and plastered on to the front of the bearer.

(2) A scallop-edged plate [65], with a single loaf on it, and what appears to be a hand passing over the rim: broken away on the side which would be next to the body of the bearer, if the hand were the right hand.

(3) A miniature jug [68], with high neck and loop-handle, spout broken, and base distorted by attachment to a support.

(4) A larger and very rude example [67] of a similar offering, in clay, with a broken stalk below.

(5) Two wreath-like fillets [32–3], one with crossed ends, both in clay γ.[3] These may be actually wreaths, as I suggested in the Cypriote instances; but they may also very probably be dedicated girdles, like those in the Knossian deposit.[4]

(6) Several examples occurred [75] of deep conical cups from 6·5 to 5 cm. high, and from 5 to 3 cm. across the rim, which have likewise been distorted below by attachment to their bearers.[5] One of them, in clay 3, has a good black surface; two others shew traces of the brick-red.

(7) A very small and abbreviated rendering ([30]: 3·5 cm. high) of the human female type with peaked collar, in clay 3, with fine black surface and traces of white paint. The head is missing, and the body from the waist downwards is distorted by attachment to a smooth surface like that of the skirted figures already described (p. 368), part of the substance

[1] *Cyprus Museum Catalogue*, p. 153 ff., esp. No. 5528, 5532; *J.H.S.* xvii. p. 166.

[2] Compare *C.M.C.* No. 5522–4, and *J.H.S.* xvii. p. 166, Fig. 15^{12}.

[3] Cf. *C.M.C.* No. 5533–4, and *J.H.S.* xvii. p. 166, Fig. 15^{4}.

[4] For similar girdles see *Am. Journ. Arch.* vii. 406. Ζώνη ἀργυρᾶ, in a Plataean dedication: and Rouse, *Greek Votive Offerings*, pp. 74, 249, 252.

[5] Cf. *C.M.C.* No. 5525–7 and *J.H.S.* xvii. p. 166, Fig. $15^{9,10}$.

of which has been squeezed up over the lower margins of this figure, to keep it in place. Traces of white paint on the rough back of this little figure shew that the figure which carried it was fully painted before the infant (as it appears to be) was attached; and the hands, raised and clasped in an attitude of adoration, complete the parallel with *C.M.C.* p. 153, No. 5520, cf. *J.H.S.* xvii. p. 167 (Ashmolean Museum), and 'bird-faced' figures from Mycenae[1] and elsewhere.

(8) A very much ruder figure [31], club-shaped, forked and fractured below, and ending above in a human face, with the disc-like male coiffure above described, seems to be of the same purpose. A narrow fillet of clay, preserved with it, was loosely attached, when it was found, to the right side of the head, explaining the absence of the right ear: this fillet, which became detached in transit to Palaikastro, represented the right arm of the infant, raised to the head in a familiar Aegean gesture. The still ruder figure [10] probably represents another male child.

(9) Another object [74] of uncertain use, in clay γ, was certainly attached to some support, and probably represents some votive offering. It consists of two fillets of clay 1 cm. thick, coiled into C-spirals, and set back to back with a small pellet in each angle of juncture. The whole measures 5 cm. along the junction, and 5·5 across the two C-spirals. The scar of attachment is clearly seen extending from one of the juncture pellets across one of the four spirals, over a space 3 cm. by ·5 cm.

The only other objects which need record are:—

(10) A number of miniature vases 3–3·5 cm. high, all of the same deep-rimmed bowl-form [69–71], with one, two, or three small vertical handles, set about the greatest diameter of the body. Those which are whole shew no signs of attachment; and they are probably analogous to the miniature vases which occur copiously in one of the caves on Mt. Juktas, and in the 'altar of burnt offering' on the principal acropolis of Idalion.

(11) A very large number of small clay balls [66], from 2·5 to 1·5 cm. in diameter, well rounded, but without ornament or appendage of any kind.

(12) A rude representation [73], in clay γ, about 6 cm., of a tree of exactly the same kind as that which is so common in certain Cypriote sanctuaries, particularly at Soloi and Khytroi.[2] The present example, which

[1] Ἐφ. Ἀρχ. 1888 Pl. 9[16]. Compare also the references in Rouse, *Greek Votive Offerings*, p. 257.

[2] *C.M.C.* No. 5305–14; *K.B.H.* xl., xli., ccxv.

is about 6 cm. high, spreads out below into a standing base which has incrustation on the underside. It is, however, not clear whether it was an independent offering, or part of a larger group like the Cypriote ring-dances already quoted (p. 362).

(13) A small fragment, in clay *a*, of a flat plaque, 1 cm. thick, with a straight raised edge, 1 cm. high, on which remain apparently two hand-like appendages, which grasp the rim from the inner side. It seems to be a base of some kind, as the underside is rough ; but whether the appendages are hands, or distorted feet, or merely parts of a chair or other superstructure, cannot be determined now.

(14) One or two small fragments seem to have represented implements of some kind ; but their purpose is quite obscure.

II.—INTERPRETATION OF THE VOTIVE OFFERINGS.

Perhaps a word should be added as to the probable motives for so varied an accumulation of objects. That the deposit was of a votive purpose seems clear from the miniature scale of the figurines themselves, from their position in a single ash-layer, from the devotional gestures of the women, and from the character of the objects,—men, women, and cattle,—which formed by far the largest section of the offerings. Of the character and attributes of the deity, the collection tells us nothing ; double-axes, serpents, and crosses, for example, are conspicuous by their absence ; and the rarity of the tortoises (which might at first sight suggest an Aphrodite-cult), and the early date of the deposit, make it probable that these figures belong to the imprecatory, not to the symbolic group. The probability, also, that we have to do with the everyday costume, both of men and of women, suggests that the human figures represent not the deity but the votaries.

Neither human figures nor those of cattle need detailed comment : both are ubiquitous on sacred sites, in the Aegean and elsewhere : and both are offered for a variety of purposes to secure the divine protection, whether burned or merely deposited in the sacred place ; and also, when burned or 'passed through the fire,' to purify or to effect a counter-charm.[1]

[1] Frazer, *Golden Bough*,[2] iii. 265 ff. 320. Kolben, *State of the Cape*, i. 129. Wuttke, *Deutsche Volksaberglaube*, p. 80.

The limbs, too, and the furniture, miniature vases, and articles of dress, are commonplaces of dedicatory ritual.[1] The animals carried, as some of the fragments shew, by human votaries are more probably offerings than symbols; especially in view of the analogy *e.g.* of the Kamelarga series in Cyprus already quoted; and of the association, in both cases, of offerings of food and drink with the offerings of whole animals.

Only three groups, therefore, offer any real difficulty: the bisected human figures, the offerings of wild animals, especially of vermin, and the aniconic spheres. (1) Several examples occurred of ordinary male figures quite naked (*i.e.* without foot-stand or loin-cloth[2]) and bisected from crown to groin by a clean cut [35]. These are susceptible of more than one interpretation. They may have been attempts to exhibit more exactly the seat of internal disease; and in that case would fall into line with the detached arms, legs, and other parts of the body. Or they may refer to some such sacrificial rite as the 'Sawing the Old Woman' which Dr. Frazer has discussed at length,[3] especially connected, as this is, with magical attempts to secure 'good luck' for the survivors and their belongings. If, however, any such ritual had been in question, even annually, one would have expected something more than a rare variant: and I incline to the first interpretation above.

(2) The dedication of wild animals usually comes about as a 'first-fruit' of the chase;[4] and the frequent occurrence of dogs at Petsofà gives colour to this interpretation of the second class of figures. But the absence of the larger kinds of game, and particularly of the Cretan *agrimi*, puts it almost out of court; and the consideration that the commonest non-domestic animal at Petsofà is the weasel or some such definitely *noxious* animal, and that the hedgehog also is in widespread evil repute among pastoral peoples on the charge of 'sucking the cows,' suggests rather that these vermin are offered by way of imprecation, or out of gratitude for deliverance from their ravages. Compare the Hellenic mouse-cult in the Troad,[5] and the mice and snakes in Palestine.[6] Actual cases of analogous vermin-offerings are

[1] Instances in Rouse, *Greek Votive Offerings*, p. 211 ff. (limbs), p. 301 (vessels, wreaths), p. 249 (dress). Evans, *B.S.A.* ix. p. 83 (dresses).

[2] One of them, however, shews a loin-cloth after being more carefully cleaned; so Mr. Bosanquet writes.

[3] *Golden Bough*,[2] ii. 86.

[4] Rouse, *G.V.O.* p. 50, and the bronze hare, p. 68, Fig. 9.

[5] Paus. x. 12, 5.

[6] I *Samuel* 6, 5; *Numbers* 21, 9; cf. Rouse *G.V.O.* 42, n. 4.

the rabbit,[1] the bronze mice from Palestine,[2] and the bronze beetle (or is it a six-legged tortoise?) from Olympia;[3] and close parallels are afforded by the numerous Hellenic instances of shrines at which various animals were burnt, and where no kind of offering came amiss,[4] and also by the many ceremonies in other parts of Europe in which wild (by preference but not necessarily) noxious animals are sacrificed to propitiate or to avert evil;[5] and especially as a charm against witchcraft.[6] The exact significance of individual offerings can hardly be ascertained in such a case as this: but the coroplast, like Nature, *οὐδὲν ποιεῖ μάτην*.

(3) The same applies to the merely spherical offerings [66]. The custom of throwing pebbles, pellets, and missiles of various kinds either into bonfires or into sacred places or *at* a cult-object is very widespread,[7] and easily intelligible. Its least obscure form is the common Buddhist ritual of writing a petition on a slip of paper, rolling or chewing this into a pellet, and throwing or spitting it at the cult-image; if the pellet sticks, the prayer is heard. And there are in any case so many favours which might be asked, or benefits to be acknowledged, which do not lend themselves to iconic treatment, that it is not at all surprising to find such pellets, in a fire-proof material, associated with so omnivorous a bonfire as that of Petsofà.

12.—AEGEAN WOMEN'S-DRESS, AND ITS AFFINITIES.

The remarkable analogies presented by Aegean female costume—outlined long since on objects from the Shaft Graves at Mycenae, and revealed in detail by the Knossian deposit and the series from Petsofà—with the tight-fitting bodice and gathered skirt of mediaeval and modern

[1] *Am.* xix. 171, cf. Rouse, p. 301.

[2] M. Thomas, *Two Years in Palestine*, p. 6; Rouse, p. 190, n. 8; cf. I *Samuel* vi. 4–5: the last-named particularly interesting, as it occurs in conjunction with representation of disease, as at Petsofà, and in one of the best authenticated areas of Early Aegean colonisation.

[3] *Bronzen von Olympia*, xiii. 213; Rouse, p. 299.

[4] Paus. 4, 31, 9; 7, 18, 12; Rouse, p. 298.

[5] Frazer, *Golden Bough*,[2] iii. 324 (fox-cat-squirrel, snake): N. W. Thomas, *Folklore*, xi. p. 247 ff. esp. p. 255 (weasels), 256 (badgers), 261 (ritual cakes in shape of cockchafers).

[6] Wuttke, *Deutsche Volksaberglaube*, p. 185; *Globus*, xxviii, p. 151. These and many of the previous and subsequent references I owe to the learned help of Mr. N. W. Thomas.

[7] Hartland, *Legend of Perseus*, i. 176, ii. 186, 197; *L'Anthropologie*, viii. 482; *Archaeologia Cambrensis*, 1885, p. 152; *Les Missions Catholiques*, 1900, p. 54; Erman, *Archiv. f. Anthropologie*. xii. 323, xix. 386; Kralcheniminchow, *Hist. de Kamtchatka*, i. 94; Schweinfurth, *Heart of Africa*, i. 142; Mockler-Ferryman, *Up the Niger*, p. 142: *Antananarivo Annual*, iii. 456.

Europe, challenges more detailed examination than the limits of this paper allow; but a brief summary of the problem as it presents itself now is perhaps permissible here.

The *skirt*, suspended from the waist and gathered there into a tight waistband, and the *bodice*, sleeved or sleeveless, and more or less completely open from the neck to the waist, have a very long history on European soil; at least as long a history as the open-sided 'Doric chiton' in North Africa, or the full-length sleeved 'Ionic chiton,' and its open-fronted 'dressing-gown' counterpart, in Hither Asia. The evidence for this long history is threefold.

(1) In all the more inaccessible regions of Central Europe, and especially along the Alpine barrier, survives a series of peasant-costumes, which, however they may differ in detail, are fundamentally identical in type. They all include the full tight-waisted skirt, and the open-fronted bodice; and wherever underclothing of the Oriental linen type has established itself as part of the costume, the bodice has become low-necked in front, and either sleeveless or open-sleeved, so as to exhibit as much as possible of the linen-wear.

(2) If this costume were confined to the highlands of Alpine Europe, it would not of necessity be of ancient descent: but in fact a similar series appears almost universally in the long-isolated highlands, netherlands, and islands of Western Europe; in the Pyrenees, in Brittany, in Wales and Scotland, in the Low Countries, and in Scandinavia: from which it may be inferred that the costume goes back to a time when these western regions of survival enjoyed a common culture with the Alpine regions; and this time is clearly very remote, and certainly anterior to the great series of lowland migrations which make up the pre-history of the European peninsula from the Bronze Age onwards.

(3) Certain monuments, of various early though uncertain dates, give rude representations of bodice-and-skirt costumes which are essentially similar to the type: *e.g.* the figurine from Kličevac in Servia,[1] the stele from Körösbanya in Siebenburgen,[2] the incised representations on the black polished vases from tumuli at Oedenburg.[3]

(4) One actual example of the costume in question has survived from the Early Bronze Age of Denmark; namely the bodice and skirt from the

[1] Hoernes. *Urgeschichte der Kunst.*, Pl. IV. [2] Hoernes, *l.c.*, p. 218, Fig. 48–50.
[3] Hoernes, *l.c.*, Pl. XXVIII.–XXXI.

tumulus of Borum-Eshöi : and a comparison of the dressmaker's diagram for this bodice with that for the Cretan bodice shews at once how faithfully the type persists from end to end of its area of distribution. The only difference, in fact, is that whereas in Denmark the neck is inserted through a slit in the cloth, so that the breast is fully covered, as befits a cold climate and linenless culture, in Crete, which is southerly, warmer, and in sea-communication with an immemorial linen-centre in Egypt, the neck flap is cut clean away over each shoulder, and by standing up behind the head when the garment is made up, gives rise to the characteristic Cretan collar which reveals itself thus as an instructive survival of a very primitive expedient of the dress-maker.

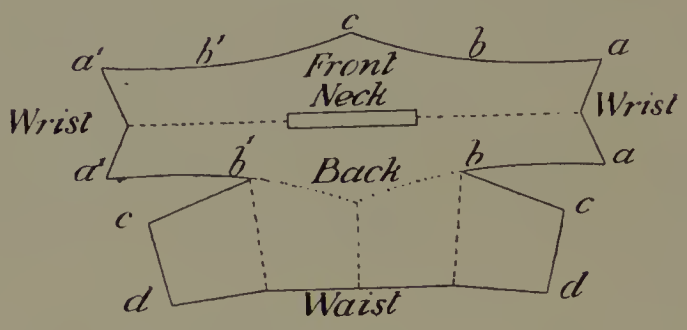


FIG. 3.—DIAGRAM FOR BODICE ; BORUM-ESHÖI.

(After Sophus Müller, *Aarböger f. nord. Oldk.*, 1891, and *Nordische Alterthümskunde*, 1897. p. 272, Fig. 135.)

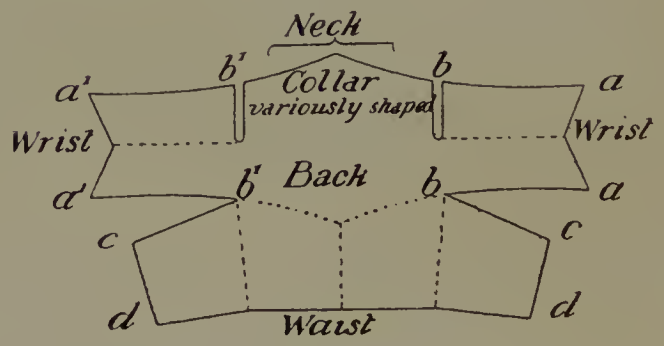


FIG. 4.—DIAGRAM FOR BODICE ; CRETE.

(Inferred from the costume of the faïence and terracotta figures.)

Description of the Figures.

In both cases the garment is formed by folding a single piece of cloth, shaped as shewn, along the dotted lines : so that the points *aa*, *bb*, *cc* (and so forth) are respectively superimposed : and sewing it together along the edges which then will be in contact. The experiment can easily be made with a piece of note-paper, joined with paper-clips or strips of gummed paper.

Under these circumstances, the new data contributed by the Aegean finds are two. *Firstly*, the evidence from Mycenae shews that the bodice-and-skirt costume was in vogue over a prolongation of the Alpine region far further south-eastward than there was any reason previously to suspect: into an area, in fact, the oldest *historical* costume of which, the 'Doric chiton' of Herodotus,[1] was not an ἔνδυμα but an ἀμφίβλημα, and was of a type which has its survivals only on the *southern* coastlands of the Mediterranean, in the uniform costume of the peasant-women from Morocco to Egypt. *Secondly*, the evidence from Crete not only puts back the vogue of this costume to a far earlier date than the examples from Mycenae would indicate; but also, thanks to the remoteness of Crete and the marked originality of its Minôan culture, justifies the same inference which was drawn above from the remote and long-isolated areas of Northern and Western Europe: namely, that the analogies between primitive Aegean and primitive European costumes may fairly be inferred to result rather from a very ancient community of culture, than from any recent intrusion, cultural or political, on either side of the comparison. Crete, in fact, stands out once more—as neolithic Knossos would seem already to suggest,—as an outpost, eastwards, of chalcolithic, if not of neolithic Europe.

From this conclusion it would seem to result that the rare monuments of early female costume in the intervening and adjacent areas must be subjected to fresh review. In particular, the occurrence, on one of the clay 'idols' from Hissarlik,[2] of neck line and waist line, connected by a vertical line down the front of the body, would seem to result, probably, from an attempt to render the main outlines of just such a jacket-bodice as has been described: and then the well-known 'idol' with the 'cross-over' costume[3] would fall into its place in the series.

It will also be necessary to reconsider the prevalent opinion that the female figures from the Thracian tumuli and from the megalithic monuments of Malta are intended to be represented as nude, and as steatopygous[4]: for one of the Thracian figures has elaborate surface ornamentation (usually described as tattoo marks), and one of the Maltese

[1] ἐπεὶ ἥ γε Ἑλληνικὴ ἐσθὴς πᾶσα ἡ ἀρχαίη τῶν γυναικῶν ἡ αὐτὴ ἦν <καὶ> τὴν νῦν Δωρίδα καλέομεν, Hdt. v. 88.

[2] Perrot-Chipiez vi., Fig. 337.

[3] *Ilios*, Fig. 193-4.

[4] *E.g.* Hoernes, *Urgeschichte der Kunst*, p. 208.

ones[1] has a well-marked horizontal subdivision about the level of the knees, which can hardly be anything but a fold or flounce of a skirt. It may even be questioned whether the so-called 'steatopygia' of these figures may not be partly due to the attempt to render the voluminous skirts of a sitting figure: compare, for example, the attitude of the seated and skirted ladies in the Knossian miniature-frescoes with that of the majority of the Maltese figures.[2]

How long did the Aegean retain the bodice-and-skirt costume of the Minôan and Mycenaean Ages? The 'bird-faced' idols of Mycenae, Tiryns, and other Mycenaean sites on the mainland of Greece, stand clearly enough on the upper side of the line; for the scheme of the painted ornament differs, almost universally, on the skirt, and above the waist; and the two regions are usually separated by a well-marked belt. The case is less clear in regard to the monuments of the next period; the women on the Dipylon vases, and on the similar vases from Amyclae, retain the distinction of tints, and have a thoroughly Mycenaean waist-curve; some of the Boeotian figurines, with their reminiscences of the Mycenaean hat, preserve, in spite of their lack of 'waist,' a differentiation of ornament which recalls the treatment of the Mycenaean 'bird-faced' type; and a similar decorative tradition runs far down into early Hellenic vase-painting, and gives rise to manifold confusion there. It is difficult, for example, to believe, in spite of the long and perplexing series of intermediates, that the women on the engraved cuirass from Olympia[3] are not intended to be represented in bodices and skirts, defined at the junction by a tight-fitting belt of the ancient type: and in the case of the very remarkable series of leaden votive figures from the 'Menelaion' in Laconia,[4] the balance of evidence certainly seems to incline to the view now suggested: yet the male figures of the same series wear regular hoplite armour, and can hardly be of earlier date than the seventh or eighth century.

On the literary side, similarly, the current views may well need drastic revision; now that Studniczka's comment on the *στήθεα ἱμερόεντα*

[1] Perrot-Chipiez iii., Fig. 231.

[2] Perrot-Chipiez iii., Fig. 230. I have had occasion to discuss this attitude in another connection elsewhere. *Journ. Anthr. Inst.* xxx. p. 252 ff.

[3] *Bronzen*, Pl. LVIII.

[4] *A.Z.*, 1854, p. 217, Pl. 65. Studniczka, *Tracht*, p. 32. I hope before long to return more in detail to this remarkable series.

of the Homeric[1] Aphrodite has found so marked endorsement in the Knossian deposit. Finally, if the old Aegean dress can be traced surviving, locally at all events, on into the very twilight of Hellenism, what is its relation to that long series of modern peasant costumes in the Cyclades and in Crete, which, evading the taint of the Anatolian (and eventually Mohammedan) dressing-gown costume of the 'Albanian' area, still retain the full tightly-gathered skirt, and the tight-laced, often sleeveless, and always open-fronted jacket-bodice of the primitive European type?[2] If in Karpathos, for example, the 'Ionic chiton' could last on, within living memory, as the costume of the women, unqualified, it hardly seems impossible that in remoter Crete a costume should have survived, similarly unqualified down to Tournefort's time, and merely coupled with Turkish underwear in Pashley's,[3] and our own, which was still, we may suppose, in vogue in the island when the Ionic chiton was still 'the last new thing' in Karpathos; and which had, besides, the advantage of immemorial antiquity behind it.[4]

The same argument can be constructed in regard to the fanlike Minôan headdress of Petsofà: the principal data being the fanlike headdresses associated with the bodice-and-skirt peasant costumes, from the Tyrol to Brittany and Scandinavia; and in modern Greece the wonderful headgear of the costumes of Corfu and Amorgos.

J. L. MYRES.

[1] Studniczka, *Tracht*, p. 33. *Iliad*, 3, 396. The κεστός girdle of Homeric costume is another case in point, now that we have the tight-waisted costume and the votive girdles to compare with it.

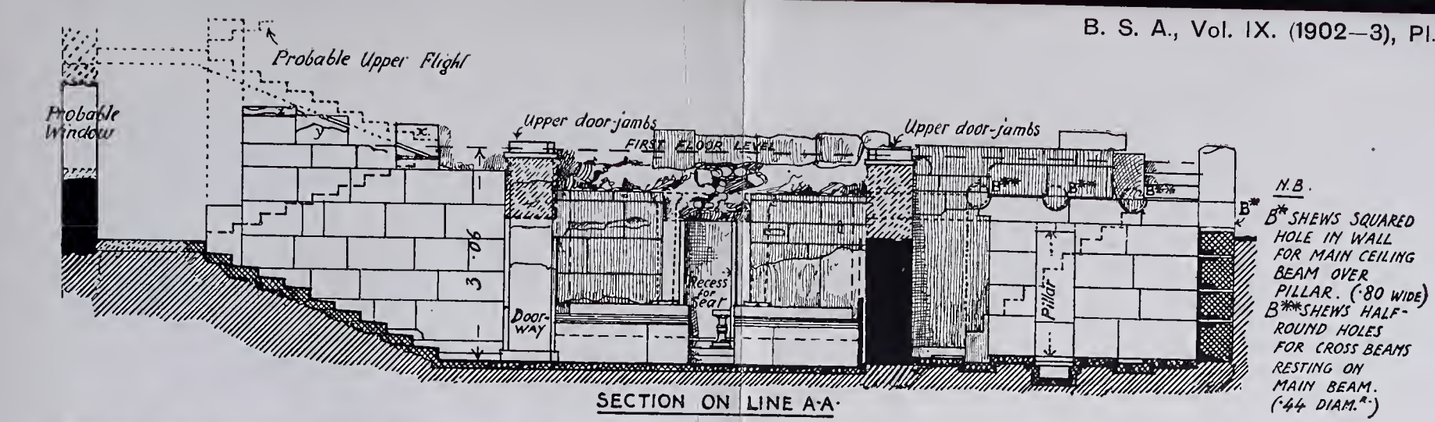
[2] *E.g.* von Hahn, *Griechische u. Albanesische Märchen*, vol. i. Frontispiece. The frontispiece of vol. ii. gives examples of the Albanian or dressing-gown type.

[3] Pashley, *Travels in Crete* ii. p. 195–6; with woodcut and extract from Tournefort.

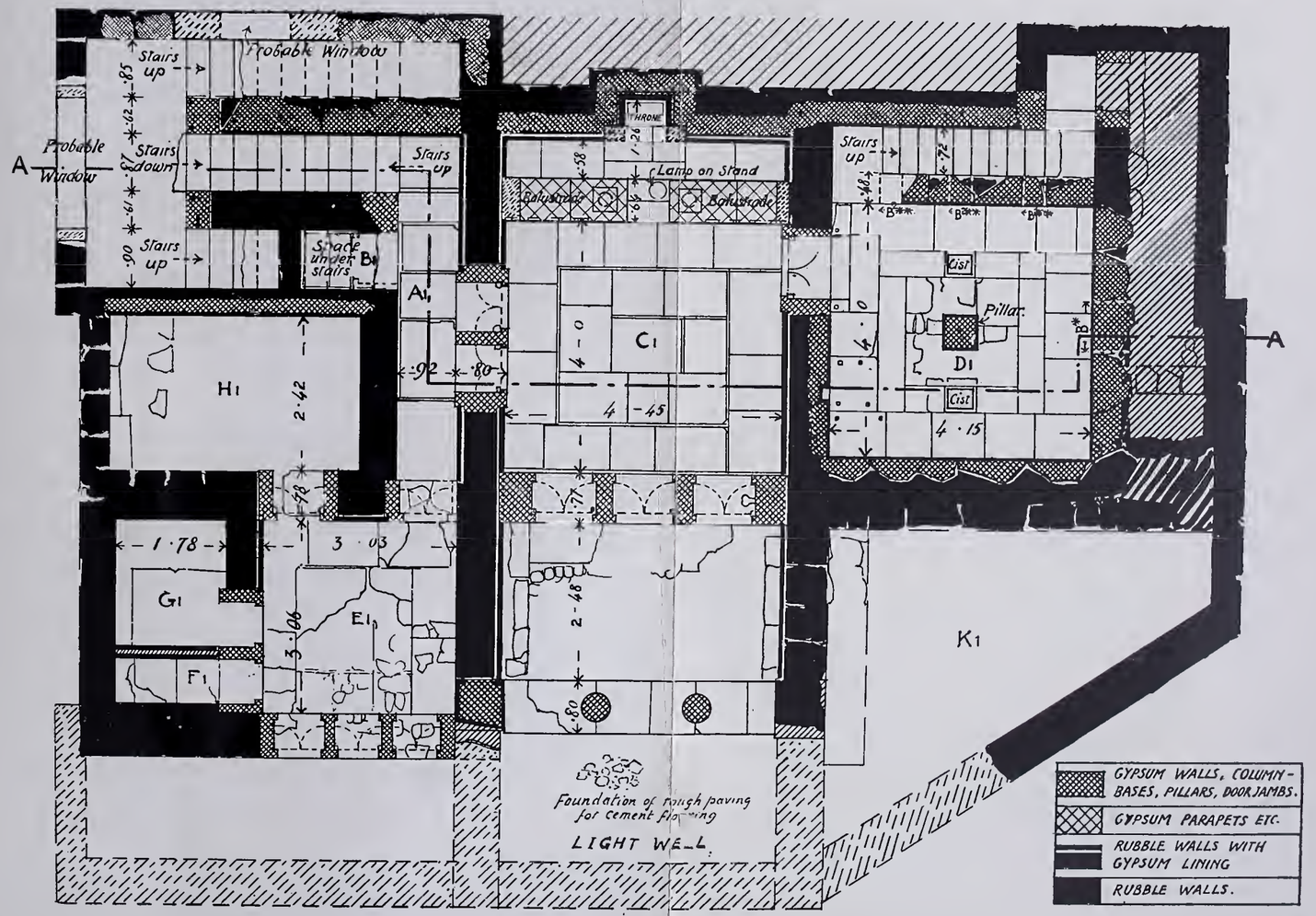
[4] Note that in Kalymnos and its modern colonies, and I think also in Kos, the 'Ionic chiton' or 'night-gown'-type has the Anatolian 'dressing-gown' simply superimposed: and the same combination is shewn more than once in von Hahn's Frontispiece to vol. i.

Note to p. 364.

In a letter received since this paper was in type, Mr. Dawkins suggests to me that what I have described as a 'loin-cloth' may be a 'Bantu sheath' of the type which is familiar on sculptured and modelled figures of Predynastic style in Egypt.



SECTION ON LINE A-A·



PLAN OF GROUND FLOOR

PLAN AND SECTION OF ROYAL VILLA, KNOSSOS (*see p.* 132).

Middle Minôan Polychrome Pottery (First Palace, Knossos) from below Olive Press Room.

B. S. A., Vol. IX. (1902-3), Pl. II.

Faïence Relief: Wild Goat and Young. From Temple Repository of Second Palace, Knossos.

Plan of Excavations at Palaikastro, 1903.

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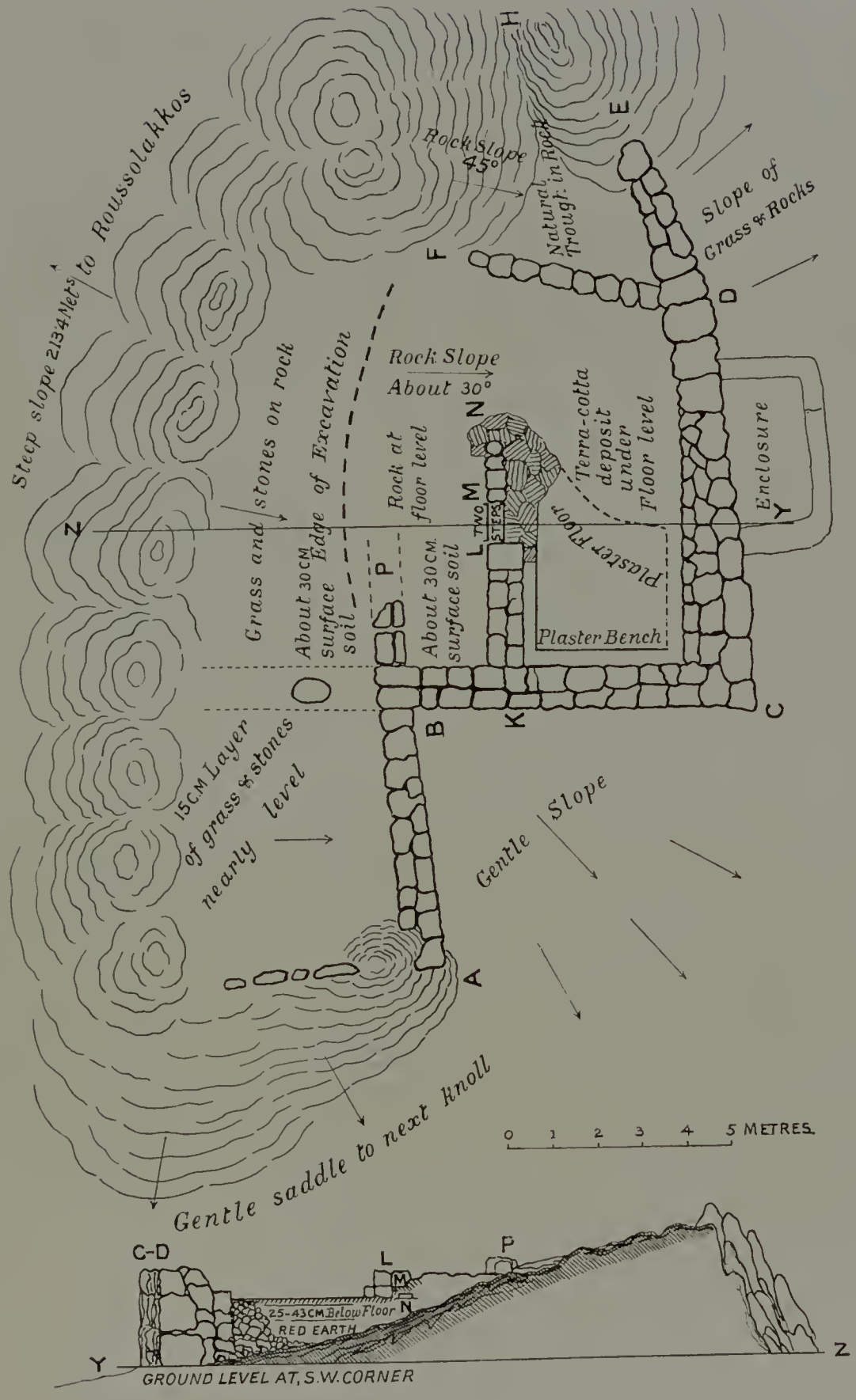
Steep slope 2134 Nets to Roussolakkos
Rock Slope 45°
Natural Trough in Rock
Slope of Grass & Rocks
Rock Slope About 30°
Edge of Excavation
Grass and stones on rock
About 30 CM. surface soil
Rock at floor level
About 30 CM. surface soil
Terra-cotta deposit under Floor level
Enclosure
Plaster Floor
Plaster Bench
TWO STEPS
15 CM Layer of grass & stones nearly level
Gentle Slope
Gentle saddle to next Knoll
0 1 2 3 4 5 METRES.
C-D
25-43 CM. Below Floor
RED EARTH
GROUND LEVEL AT S.W. CORNER

Plan and Section of Excavation at Petsofà.

VOTIVE TERRACOTTAS FROM PETSOFÀ: FEMALE TYPE.

(Reconstituted from the series in the Candia Museum by R. M. Dawkins. Full size.)

Terracotta Figures from Petsofà: I. Men.

Terracotta Figures from Petsofà: II. Women.

Terracotta Figures from Petsofà: III. Votive Limbs.

Terracotta Figures from Petsofà: IV. Animals, Vessels, &c